PIONEER®
The future of sound and vision.

Operating Instructions
Mode d'emploi
Bedienungsanleitung
Istruzioni per l'uso

VSA-730

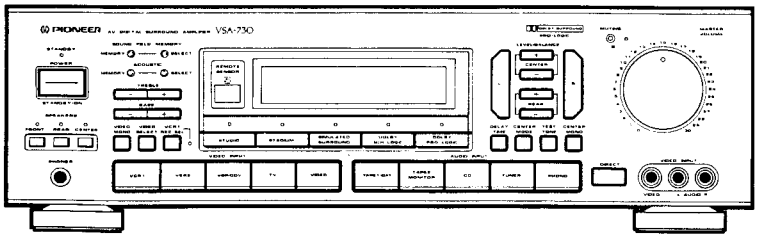
English

Français

Deutsch

Italiano

AV DIGITAL SURROUND AMPLIFIER
AMPLIFICATEUR A/V A DEPHASAGE NUMERIQUE D'AMBIANCE
AV DITAL SURROUND-VERSTÄRKER
AMPLIFICATORE DIGITALE SURROUND A.V.



WARNING: The apparatus shall not be exposed to dripping or splashing.

IMPORTANT

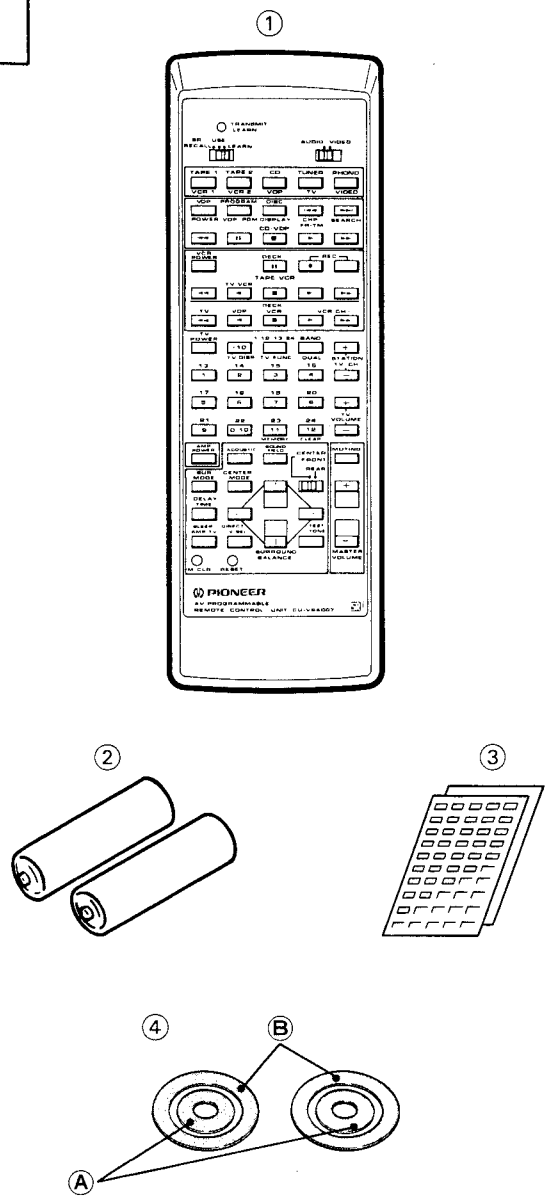
The lightning flash with arrowhead, within an equilateral triangle, is intended to alert the user of the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

CAUTION
RISK OF ELECTRIC SHOCK
DO NOT OPEN

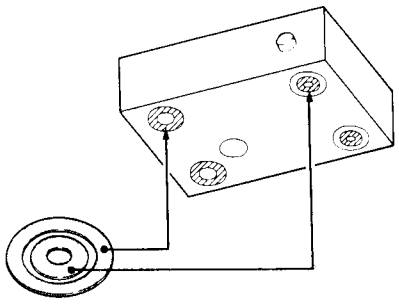
CAUTION:
TO PREVENT THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

The exclamation point within an equilateral triangle is intended to alert the user of the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

1


①
②
③
④
Ⓑ
Ⓐ

2



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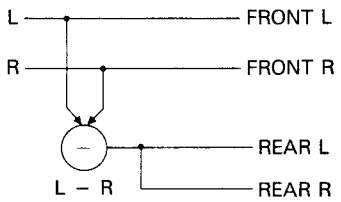
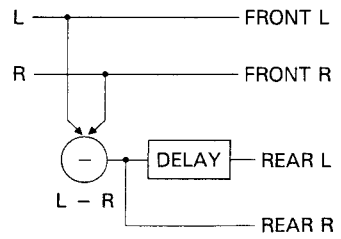
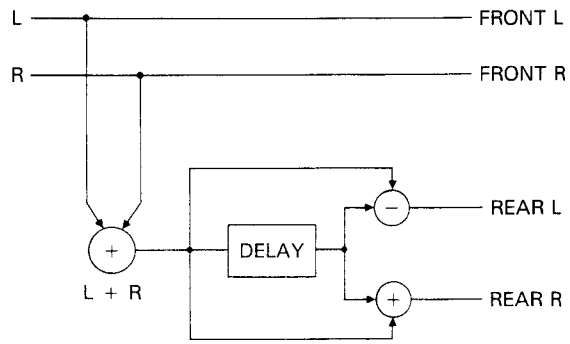

L
R
FRONT L
FRONT R
REAR L
REAR R
L – R

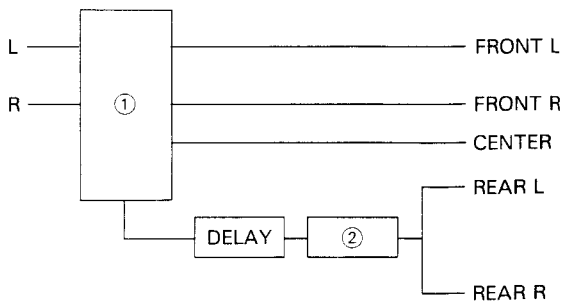
4


L
R
FRONT L
FRONT R
DELAY
REAR L
REAR R
L – R

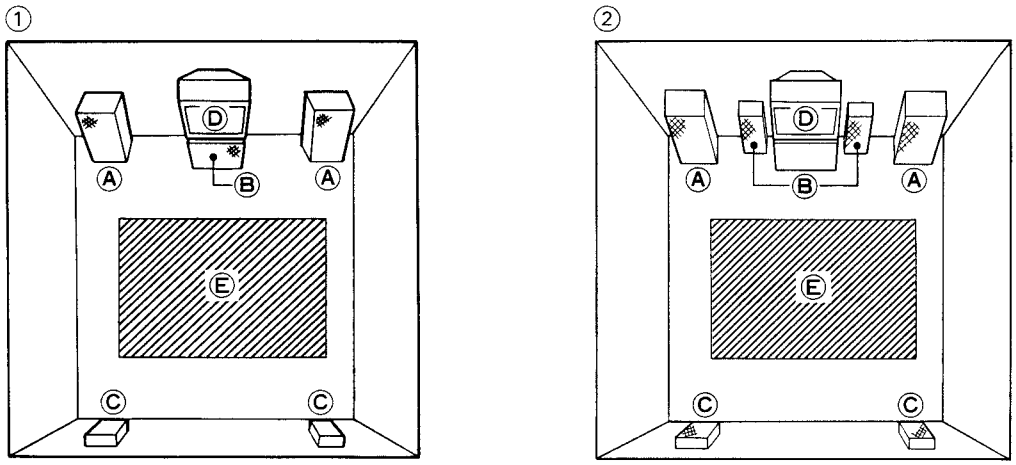
5


L
R
FRONT L
FRONT R
REAR L
REAR R
DELAY
L + R

6


L
R
①
FRONT L
FRONT R
CENTER
REAR L
REAR R
DELAY
②

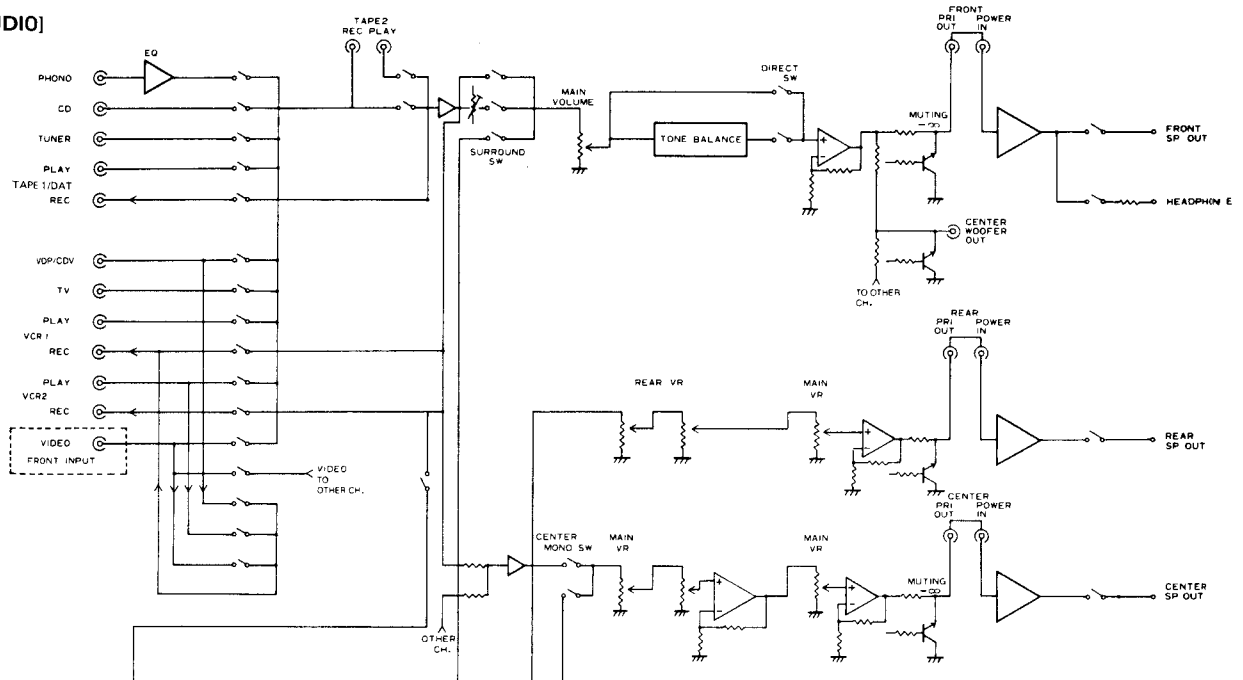
7



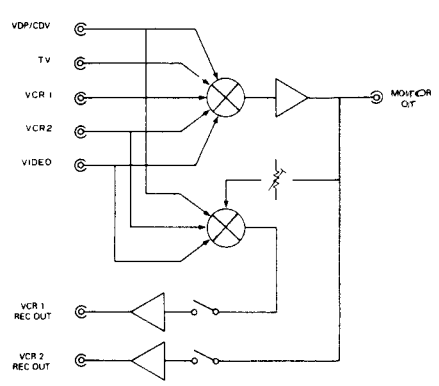
8

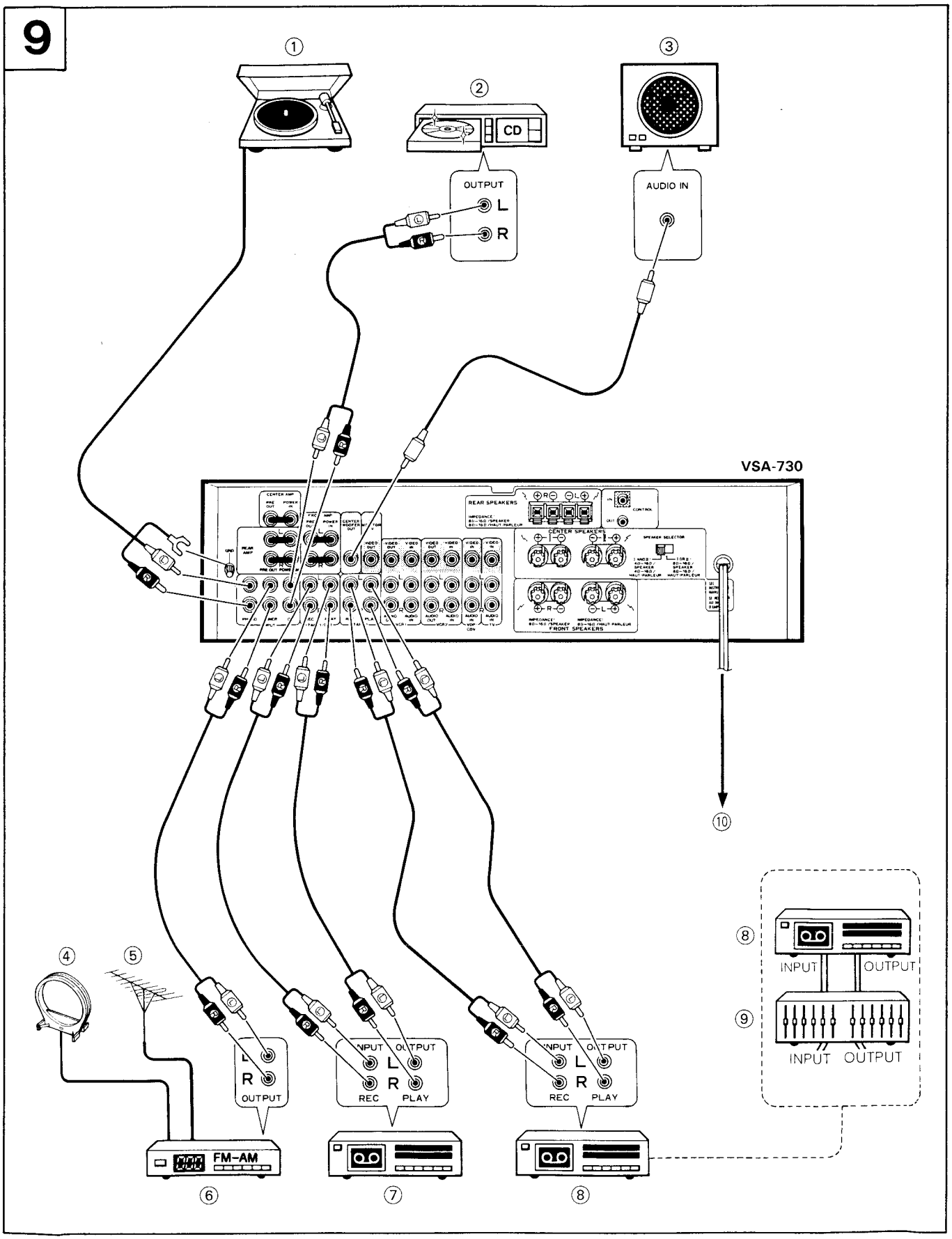
BLOCK DIAGRAM　BLOCKSCHALTBILD
SCHEMA DU BLOC　DIAGRAMMA DEI BLOCCHI

[AUDIO]

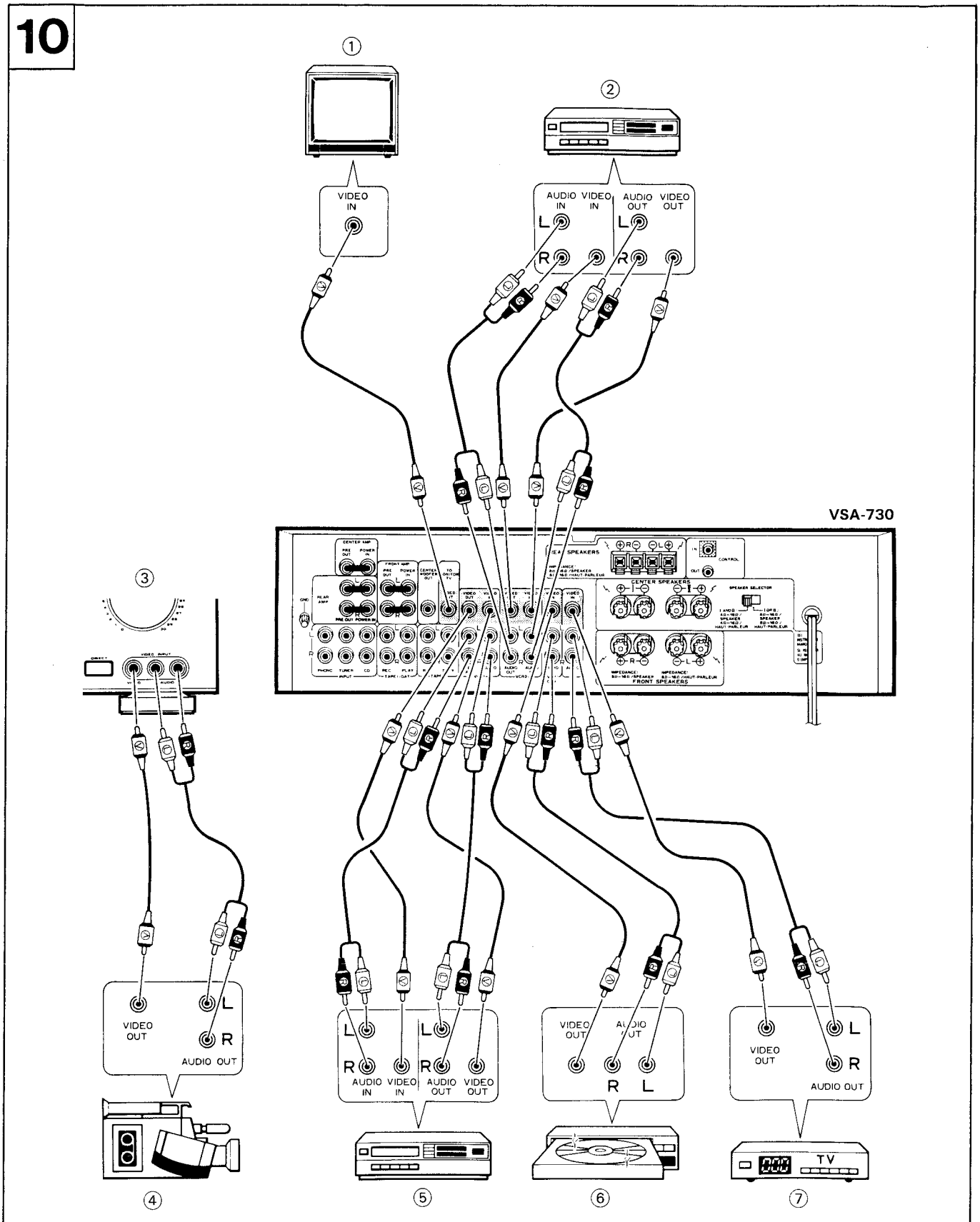


[VIDEO]

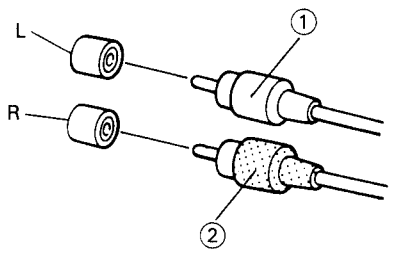



9
①
②
③
CD
OUTPUT
L
R
AUDIO IN
VSA-730
REAR SPEAKERS
CENTER SPEAKERS
FRONT SPEAKERS
⑩
④
⑤
⑧
INPUT
OUTPUT
⑨
INPUT
OUTPUT
R
OUTPUT
INPUT
OUTPUT
L
R
REC
PLAY
INPUT
OUTPUT
L
R
REC
PLAY
FM-AM
⑥
⑦
⑧

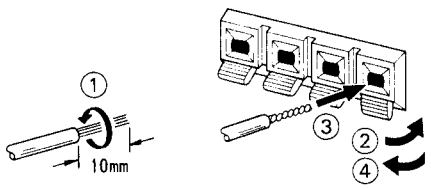
10


①
②
VIDEO IN
AUDIO IN
VIDEO IN
AUDIO OUT
VIDEO OUT
L
R
VSA-730
③
VIDEO OUT
AUDIO OUT
④
⑤
⑥
⑦
TV

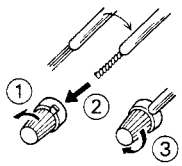
11


L
R
1
2

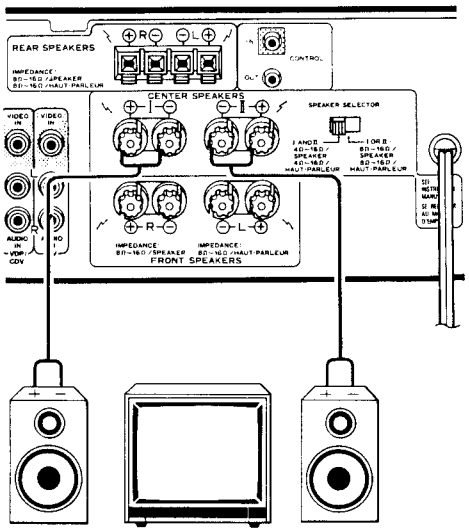
12


1
10mm
3
2
4

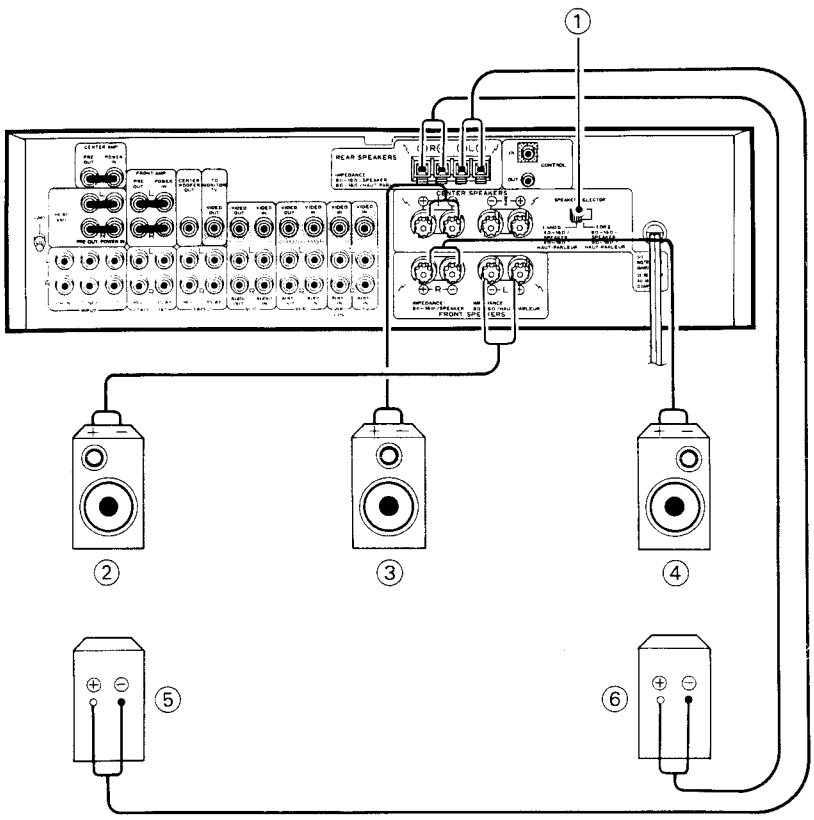
13

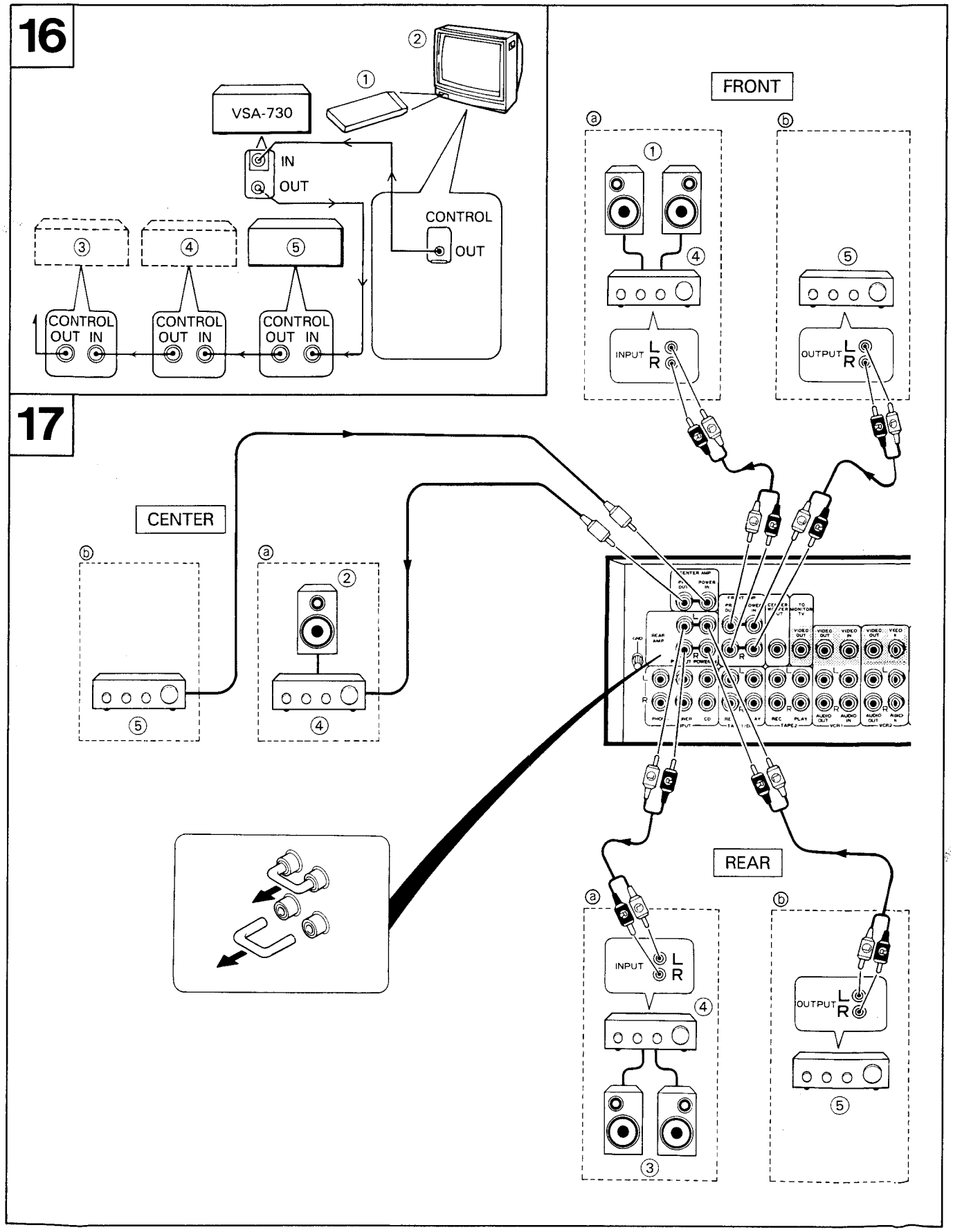

1
2
3

15


REAR SPEAKERS
CENTER SPEAKERS
SPEAKER SELECTOR
FRONT SPEAKERS

14


1
2
3
4
5
6


16
VSA-730
IN
OUT
CONTROL
OUT
CONTROL OUT IN
CONTROL OUT IN
CONTROL OUT IN
17
FRONT
INPUT L R
OUTPUT L R
CENTER
REAR
INPUT L R
OUTPUT L R

"This product complies with the Radio Interference requirements of the EC (European Community) Directive 87/308/EEC."

Thank you for buying this Pioneer product.
Please read through these operating instructions so you will know how to operate your model properly. After you have finished reading the instructions, put them away in a safe place for future reference.

In some countries or regions, the shape of the power plug and power outlet may sometimes differ from that shown in the explanatory drawings. However, the method of connecting and operating the unit is the same.

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FEATURES

• BUILT-IN DOLBY PRO LOGIC SURROUND CIRCUIT AND 5 POWER AMPLIFIER MODES.

Enjoy the presence and the expansive effect of surround playback. Five different surround effect and 4-step (DOLBY PRO LOGIC) or 7-step (STADIUM, SIMULATED SURROUND) delay times are available.

• AUTO INPUT BALANCE CONTROL

This system automatically controls input balance from the source when using Dolby Surround. Unlike the manual balance controls used in the past, this also compensates for level differences when the source is operating, actively preventing an increase in crosstalk.

• HIGH POWER

Surround mode: Front 60 W + 60 W (DIN 8Ω, 1 kHz, T.H.D. 1%)
Center 60 W (DIN 8Ω, 1 kHz, T.H.D. 1%)
Rear 15 W + 15 W (DIN 8Ω, 1 kHz, T.H.D. 1%)

• AV REMOTE CONTROL WITH LEARNING FUNCTION

With the attached remote control unit you can operate any Pioneer audio or video component bearing the SR mark. Using additional learning functions a whole AV surround system including a TV and VCR from other manufacturers can be controlled. (Some manufacturers' remote control systems, however, are not suitable for programming.)

NOTE:

- *The keys of this remote control unit can't operate equipment that does not possess the corresponding functions or does not have remote control capability.*

• VCR 1 RECORDING SELECTOR FUNCTION

You can record on VCR 1 from VCR 2, VDP/CDV or VIDEO, regardless of other functions.

• DUAL CENTER SPEAKER CONNECTION TERMINALS

There are two sets of center speaker terminals, so you can enjoy a dual center speaker setup.

• DESIGNED FOR HIGH SOUND QUALITY

DIRECT CONSTRUCTION:
To minimize unwanted noise, the route taken by the signal has been made as short as possible.
HONEYCOMB CHASSIS, HONEYCOMB HEAT SINK:
To prevent vibrations and resonances degrading sound quality, vibrations are dispersed in all directions.
ALL SOURCE DIRECT FUNCTION:
This direct switch lets you listen to sound from any source without passing the signal through sound adjusting circuitry.

• PLENTIFUL AV INPUTS

- **Audio:**

TAPE 1/DAT, TAPE 2 (MONITOR), CD, TUNER, PHONO

- **Video:**

VCR 1, VCR 2, VDP/CDV, TV, VIDEO

• VIDEO SIGNAL SELECTOR

As audio and video sources can be freely combined, you can make your original BGV easily.

• MUTUAL COPYING IS POSSIBLE BETWEEN VIDEO CASSETTE RECORDERS (VCR)

Copying can be carried out freely between VCR 1 and VCR 2.

• ACOUSTIC MEMORY

Up to 5 BASS and TREBLE settings can be preset.

• 90/60/30-MINUTE SLEEP TIMER FUNCTION

Remaining time is displayed during the sleep operation.

• SOUND FIELD MEMORY FUNCTION

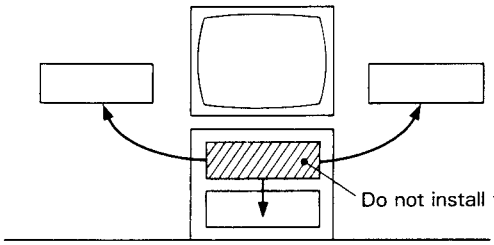
Surround mode, Balance, Delay time, and Acoustic memory are among the 5 presets possible with this function.

LOCATION

Install the amplifier in a well ventilated location where it will not be exposed to high temperature or humidity.

Do not install the amplifier in a location which is exposed to direct rays of the sun, or near to hot appliances or radiators. Excessive heat can adversely affect the cabinet and internal components. Installation of the amplifier in a damp or dusty environment may result in malfunction or accident. (Also avoid installation near cookers etc., where the amplifier may be exposed to smoke from oil, steam or heat.)

As shown in the diagram, if you install the main unit directly under the TV, it may be adversely affected by the influence of the TV, resulting in the generation of noise. Either move the unit further away from the TV, or install it by the side of the TV.



BEFORE USING THE UNIT

• See page 2, Fig [1].

• Check supplied accessories.

① Remote control unit 1
② Size "AA" (LR6/AM-3) alkaline dry batteries 2
③ Template 2
④ Cushion spacer 4
  Ⓐ For right legs (small)
  Ⓑ For left legs (large)

• Using the cushion spacers

• See page 2, Fig [2].

If the set rattles, stick the cushion spacers to the bottom of the legs. The large cushion spacers are for the left legs, and the small ones are for the right legs.

NOTE:
Peel off the backing and stick to the leg.

SURROUND EFFECT

This unit has a built in surround processor for adding presence and an expansive effect to the sound.

• STUDIO (See page 2, Fig [3])

Select this position to enjoy the effect of listening to music in a recording studio.
The source sound is output as is through the front speakers, with reverberation output through the rear speakers.
The center sound is positioned right between the front speakers. This is particularly suitable for a sound source that has a lot of reverberation.

• STADIUM (See page 2, Fig [4])

Select this position when watching sports programs such as baseball games, football games etc., for a stadium-like effect.
This position is perfect for an even more expansive effect than that produced by STUDIO.

• SIMULATED SURROUND (See page 2, Fig [5])

Use this mode for monaural sources. You will obtain an expansive sound, with outstanding presence.
Can also be used with stereo sources.

NOTE:
Only SIMULATED SURROUND operates with a monaural source. In other modes, no sound will be output from the rear speakers.

• DOLBY* PRO LOGIC SURROUND (See page 2, Fig [6])

Choose this setting for movies and music (especially Video Discs and video tapes bearing the DOLBY SURROUND mark) playback. DOLBY PRO LOGIC SURROUND continuously detects the size and direction of the dominant signal and cancels undesirable crosstalk, thereby providing signal emphasis. This results in more effective channel separation for a more powerful surround effect.
When using DOLBY PRO LOGIC SURROUND, a delay time setting of 20 ms is commonly used. Use a different setting if you prefer.

① Dolby PRO LOGIC decoder
② Dolby B NR

• DOLBY 3 CH LOGIC

By adding the signal for the rear speakers to the signal for the front speakers, the front three channels (front L, front R, and CENTER) provide a much wider, more spacious sound field than possible during ordinary stereo playback.

DOLBY PRO LOGIC SURROUND and DOLBY 3 CH LOGIC are equipped with the following 3 positions for the CENTER MODE.
When using center speaker(s):
• NORMAL
Low range frequencies, which have little effect on directionality and positioning, are routed to the left and right front speakers. So you can use relatively small size speakers as the center speakers.

• **WIDE**
If you use large size center speaker(s), choose this setting. The full frequency range of the center speakers, from low to high, is routed to the center speaker.
When not using a center speaker:
• **PHANTOM**
The signal which would have been sent to the center speaker is divided equally between the left and right front speakers.
*

Manufactured under license from Dolby Laboratories Licensing Corporation.
Dolby and the double-D symbol ⊡⊡ are trademarks of Dolby Laboratories Licensing Corporation.

SURROUND SPEAKER INSTALLATION EXAMPLE (See page 3, Fig 7)

To get the best effect out of the surround system, place the speakers as shown the figure.
① Typical surround speaker arrangement (1)
② Typical surround speaker arrangement (2)
Ⓐ Front speakers
Ⓑ Center speaker(s)
Ⓒ Rear speakers
Ⓓ Television set
Ⓔ Listening area

When DOLBY PRO LOGIC SURROUND is used without a center speaker, set the CENTER MODE switch to the PHANTOM position. Be careful not to position the rear speakers too far apart. If you do, surround level adjustment will not be possible, and you will not achieve a sufficient surround effect.

NOTE:
- *To avoid interference with the picture on a nearby TV set, use magnetically shielded speaker systems. This is particularly important for the center speaker since it is usually located closest to the TV.*
- *Position the left and right channel speakers at equal distances from the TV set.*
- *Surround speakers are best positioned to set slightly above ear level.*

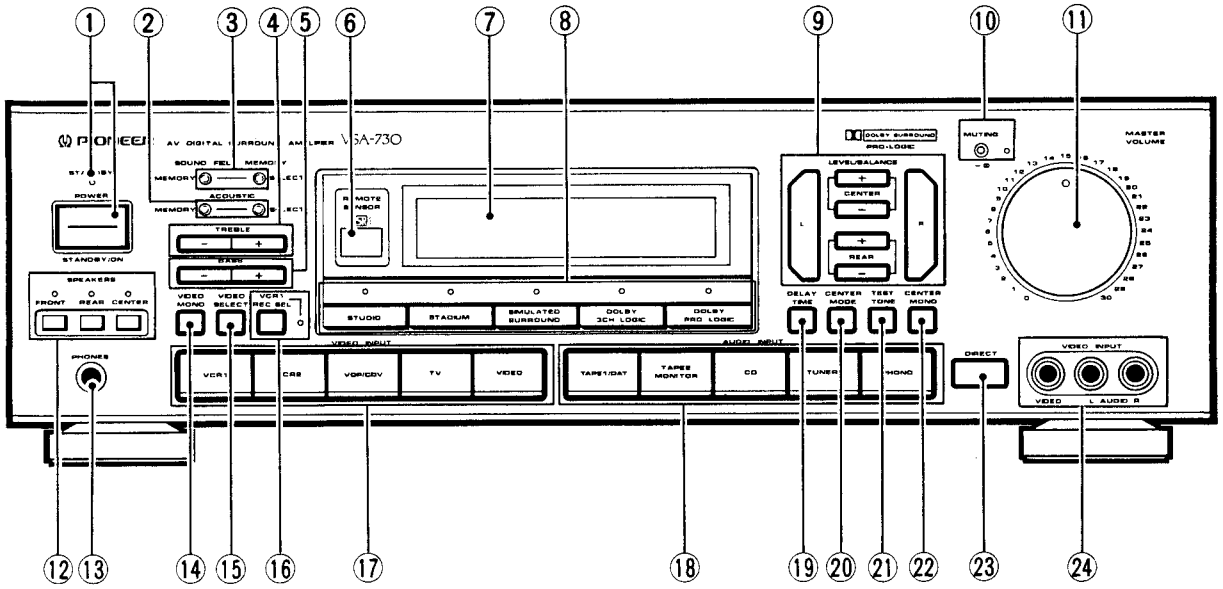
DOLBY SURROUND LEVEL ADJUSTMENT PROCEDURE

For correct SURROUND reproduction, be sure to perform this adjustment.
1. **Use SURROUND MODE switch to select DOLBY PRO LOGIC SURROUND or DOLBY 3 CH LOGIC.**
2. **Use SPEAKERS switches to turn on front, rear and center speakers.**
3. **Adjust MASTER VOLUME to a suitable listening level.**
4. **Press BALANCE L and R switches together.**
5. **Press CENTER LEVEL + and – switches together.**
6. **Press REAR LEVEL + and – switches together.**
7. **Select CENTER MODE (NORMAL, WIDE, PHANTOM) setting.**
8. **Turn on TEST TONE switch.**
9. **Adjust so that volume is the same from each speakers. Use BALANCE L and R switches, REAR LEVEL + and – switches, and CENTER LEVEL switches.**
10. **Turn off TEST TONE switch when finished.**
11. **Use AUDIO INPUT SELECTOR or VIDEO INPUT SELECTOR to select your desired source.**
12. **Adjust the desired sound level by the MASTER VOLUME.**

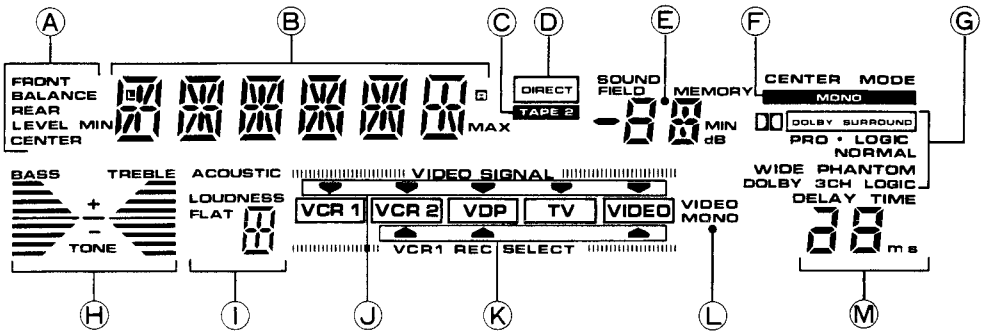
NOTE:
- *The TEST TONE turns off if you operate the INPUT SELECTOR.*

PANEL FACILITIES

FRONT PANEL FACILITIES



Display section



① POWER STANDBY/ON switch/indicator

This is the switch for electric power.

ON: When set to the ON position, power is supplied and the unit becomes operational.
The STANDBY indicator is off.

STANDBY: When set to the STANDBY position, the main power flow is cut and the unit is no longer fully operational. A minute flow of power feeds the unit to maintain operation readiness.
When the STANDBY indicator lights, the unit is in STANDBY.

② ACOUSTIC switches (MEMORY, SELECT)

Five types of tone (bass and treble) control settings can be preset.

MEMORY:
Press this switch to store in memory.

SELECT:
Tone setting changes as follows when pressing this switch repeatedly:

FLAT → LOUDNESS → Memory A → Memory B → Memory C → Memory D → Memory E →

FLAT:
Flat tone characteristics.

LOUDNESS:
Low and high frequencies are emphasized. Use this setting to obtain a full-bodied sound when listening.

Presetting the acoustic memory

1. **Adjust the sound quality as desired using the BASS and TREBLE control switches.**
2. **Press the MEMORY switch.**
3. **Press the SELECT switch and select the sign to which you wish to assign the setting (A – E) while the indicator flashes.**
   - When the indicator lights after flashing, it indicates that the command has been stored in memory. If you don't select memory positions (A – E) while the ACOUSTIC indicator is flashing, nothing will be stored in memory.
   - In this way, the desired tone will be preset in one of the five acoustic memory positions. To preset four other desired tone settings, perform the same operations.
   - To recall the memorized tone settings, press the SELECT switch to select the desired memory position.

NOTE:
- *Even if the power switch is in the STANDBY position, provided the power cord is plugged into an AC wall socket, memory will not be erased. Even if the power cord is disconnected, memory will remain for about 2 weeks.*
- *If the memory is erased, program the presets once more.*

③ SOUND FIELD MEMORY switches (MEMORY, SELECT)

In the SOUND FIELD MEMORY:
- SURROUND MODE
- CENTER MODE (In the case of DOLBY PRO LOGIC SURROUND and DOLBY 3 CH LOGIC. In other cases the center mono out ON/OFF)
- FRONT balance
- CENTER volume level
- REAR balance
- DELAY TIME
- REAR volume level
- ACOUSTIC MEMORY

Up to five of these positions can be stored in memory. It is also possible to select positions previously stored in the memory ("P" is displayed)

[Contents of "P"]
- SURROUND MODE: DOLBY PRO LOGIC SURROUND
- CENTER MODE: NORMAL
- DELAY TIME: 20 ms
- FRONT, REAR balance: CENTER
- REAR, CENTER volume level: both – 12 dB
- ACOUSTIC: FLAT

How to use the sound field memory

1. **Select ACOUSTIC MEMORY, SURROUND MODE, and adjust the DELAY TIME, balance and volume level.**
2. **Press the MEMORY switch.**
3. **While the SOUND FIELD MEMORY indicator is flashing, use the SELECT switch to select the position (A–E) to be memorized.**
   - A position is memorized when the SOUND FIELD MEMORY indicator stops flashing and lights. If the position to be memorized (A–E) is not selected while the indicator is flashing, it will not be memorized.
   - TONE settings not stored in ACOUSTIC MEMORY will not be memorized.
   - One of the five possible positions has now been stored in memory. The four remaining positions can be stored in memory using the same procedure.
   - When recalling the contents of the memory, select the memorized position with the SELECT switch.
   - In "P" nothing can be memorized.

④ TREBLE control switches

Use to adjust the high-frequency level. Press the + switch to increase high-frequency level, and the – switch to decrease it.
When both sides (+, –) of the TREBLE control are pressed simultaneously, the treble response will be set to the flat (normal) condition.

⑤ BASS control switches

Use to adjust the low-frequency level. Press the + switch to increase low-frequency level, and the – switch to decrease it.
When both sides (+, –) of the BASS control are pressed simultaneously, the base response will be set to the flat (normal) condition.

NOTE:
- *Sound quality adjustment can only be performed on the front channels. There is no change on the center channel and rear channels.*
- *Adjustment of treble and bass is not possible when the DIRECT switch is ON.*

⑥ REMOTE SENSOR

⑦ Display section

Ⓐ This lights when the front and rear balance and the rear and center volume levels are being adjusted.
During volume adjustment, Ⓑ and Ⓔ display the level, and during balance adjustment, Ⓑ displays the balance.
Ⓑ This gives alphanumeric display of the component selected by the INPUT SELECTOR.
When adjusting front and rear balance and volume or center volume, this displays balance and volume level.
It also gives alphanumeric display of SLEEP when the sleep timer is operating, and alphanumeric display of TEST when the test tone is ON.
Ⓒ This lights when the TAPE 2 MONITOR is ON.
Ⓓ This lights when the DIRECT switch is ON.

Ⓔ Displays the SOUND FIELD MEMORY selection.
During center or rear volume level adjustment, the volume level is displayed.
The time remaining when the SLEEP TIMER is operating is also displayed.
Ⓕ In any mode other than DOLBY PRO LOGIC SURROUND and DOLBY 3 CH LOGIC, if the CENTER MONO switch is pressed, this lights.
Ⓖ Displays the CENTER MODE of the DOLBY PRO LOGIC SURROUND and DOLBY 3 CH LOGIC.
Ⓗ Displays the TREBLE and BASS adjustment settings.
Ⓘ Displays the selected ACOUSTIC MEMORY.
Ⓙ Displays the currently selected video signal.
It also displays the video functions. If the VIDEO SELECT switch is pressed it changes.
Ⓚ Displays the component selected by the VCR 1 REC SEL (A component that can record to VCR 1).
Ⓛ This lights when the VIDEO MONO switch is ON.
Ⓜ Displays the selected DELAY TIME.

⑧ SURROUND MODE switches

Select surround mode to match program source.
STUDIO:
Enjoy the atmosphere of listening to music in a recording studio.
STADIUM:
Ideal for sports broadcasts, etc.
SIMULATED SURROUND:
Gives concert-hall presence to monaural sound (AM, TV, etc.).
DOLBY 3 CH LOGIC:
For playback from a stereo source, or when playing video or audio software bearing the DOLBY SURROUND mark without rear speakers connected, you can enjoy spacious sound field through the front L, front R, and center speakers.

DOLBY PRO LOGIC SURROUND:
Select this setting when watching video tapes or video disc player bearing the DOLBY SURROUND mark.
Press the mode switch that corresponds to the lit indicator once more to switch the surround mode OFF.

⑨ LEVEL/BALANCE adjustment switch

Use this to adjust the center and rear levels when you are in the surround mode, and the center level when center mono out is ON. Press the + side to raise the level, and the − side to decrease the level.
If you press both the + and − side at once, you will return to the initial level setting of − 12dB. Rear level adjustment is not possible when the surround mode is OFF.
Adjust the front left and right balance with the L and R switches.

L ..... Press to adjust the left level.
R ..... Press to adjust the right level.
L, R ..... Press both at the same time to return to the center.

⑩ MUTING switch

Press to stop sound temporarily, and the indicator flashes. Press again to return to previous volume level.

⑪ MASTER VOLUME control knob

Use this adjust volume level.
Front and rear volume levels change at the same time.

⑫ SPEAKERS switches/indicators

ON/OFF switches for the speaker systems. An indicator lights when any of these switches is set to ON.
FRONT:
Switches and indicates for the front speaker systems.
REAR:
Switches and indicates for the rear speaker systems.
CENTER:
Switches and indicates for the front center channel speaker system.

⑬ PHONES jack

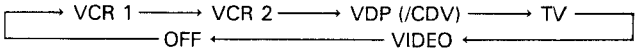
Connect the plug on your headphones to this jack. To listen to a program through the headphones, set all SPEAKERS switches to the OFF position.

⑭ VIDEO MONO switch

If you set this switch to ON, the sound from a video source connected to the VIDEO INPUT jack on the front panel ㉔ will be monaural. (VIDEO MONO on the display will light). If you connect a component with a monaural output to the L or R input jack, the sound will be the same from both left and right speakers when this switch is set to ON.

⑮ VIDEO SELECT switch

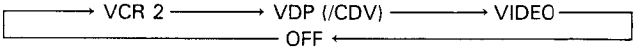
Press this to switch VIDEO OUT (TO MONITOR TV) and VCR OUT in the following sequence: (Audio doesn't change)
The recording selector has priority for VCR 1 video recording.



The display indicator (▼) lights to show the selected item.

⑯ VCR 1 REC SEL switch/indicator

Press this switch to change the source from which the VCR 1 will record in the following order.



The display indicator (▲) lights to show this.
OFF: The output signal is the same as the monitor output.

⑰ VIDEO INPUT selector switches

VCR 1:
Press this switch when playing back a tape in the video cassette recorder connected to the VCR 1 jacks.
VCR 2:
Press this switch when playing back a tape in the video cassette recorder connected to the VCR 2 jacks.
VDP/CDV:
Press to watch a program from a video disc player, CD CDV LD player connected to the VDP/CDV jacks.
TV:
Press to watch TV programs (reception with a TV tuner connected to the TV jacks).
VIDEO:
Press this when playing from equipment (video camera etc.) connected to VIDEO INPUT jack on the front panel.

⑱ AUDIO INPUT selector switches

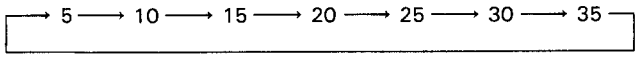
TAPE 1/DAT:
Press to listen to the device connected to the TAPE 1/DAT input.
TAPE 2 MONITOR:
Press to listen to playback sound of cassette deck connected to TAPE 2 input.
CD:
Press to listen to compact discs played on CD player connected to the CD input.

TUNER:
Press to listen to FM or AM broadcasts from tuner connected to TUNER input.
PHONO:
Press to listen to records played on turntable connected to the PHONO input.

NOTE:
If the TAPE 2 MONITOR switch is ON, sound will only be heard from components connected to TAPE 2 jacks.

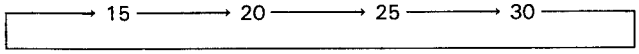
⑲ DELAY TIME switch

• **STADIUM, SIMULATED SURROUND:**
Switched the surround delay time in seven steps.



Unit: ms

• **DOLBY PRO LOGIC SURROUND:**
Switches the surround delay time in four steps.



Unit: ms

This does not operate when the surround mode is off or when STUDIO or DOLBY 3 CH LOGIC is used.

⑳ CENTER MODE switch

Selects the DOLBY PRO LOGIC SURROUND and DOLBY 3 CH LOGIC CENTER MODE (OFF, NORMAL, WIDE, PHANTOM) setting. This can only be performed when the DOLBY PRO LOGIC SURROUND or DOLBY 3 CH LOGIC is ON.

㉑ TEST TONE switch

This only operates when DOLBY PRO LOGIC SURROUND or DOLBY 3 CH LOGIC is used.
This switches the TEST TONE output ON/OFF to adjust the surround balance.
In the ON position the TEST TONE passes from the front left → center → front right → rear (L, R) (DOLBY PRO LOGIC) in that order, and can be heard for approximately 2 seconds from each speaker.

㉒ CENTER MONO OUT switch

This switches monaural (L + R) center speaker output on and off. (This switch cannot be used with DOLBY PRO LOGIC SURROUND and DOLBY 3 CH LOGIC)

NOTE:
Tone control doesn't operate with center speaker output.

㉓ DIRECT switch

Press this to listen to source sound without passing the audio signal through sound quality or balance adjusting circuitry.
To provide a better sound from the front speakers, the surround mode, center mono, and rear and center speakers are automatically switched OFF.
When DIRECT is ON, if you press the surround operation buttons ⑲, ⑳, ㉑, acoustic operation buttons ②, ④, ⑤, sound field memory operation buttons ③, ⑨, ㉒, or rear and center speaker switches, the DIRECT indicator flashes to warn you that they will not operate.

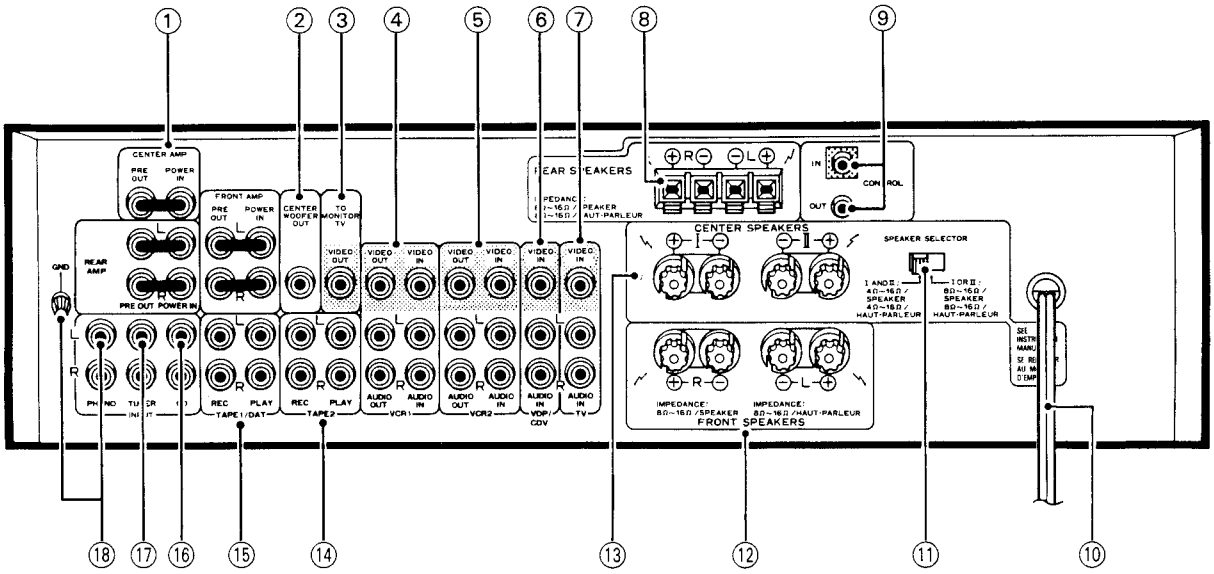
㉔ VIDEO INPUT jacks

Video components such as a video camera can be connected here.

• Last Memory Function

If you press the POWER switch after power has been cut, all settings other than MASTER VOLUME will be the same as before the power was cut.

REAR PANEL FACILITIES



① PRE OUT, POWER IN jacks

REAR AMP PRE OUT
CENTER AMP PRE OUT
FRONT AMP PRE OUT
When using a power amplifier to boost the volume of front, rear or center speakers, connect here.

REAR AMP POWER IN
CENTER AMP POWER IN
FRONT AMP POWER IN
When a preamplifier (optional) is used with the VSA-730 power amplifier to drive the front, rear or center speakers, use these jacks.
First switch the preamplifier power ON, and then switch the VSA-730 power ON.

NOTE:
When not using, be sure to connect the PRE OUT and the POWER IN with a connector bar.

② CENTER WOOFER OUT jack

If you want to boost the surround center channel low frequencies, or you want to use the unit in a 3D system, connect to a center woofer power amp.
Frequencies above about 200Hz are cut at 6dB/oct.

③ TO MONITOR TV jack

Connect to monitor TV or to TV set with video input jack.

④ VCR 1 IN/OUT jacks

For connection of first VCR.
VIDEO OUT:
Connect to VCR video input jack.
VIDEO IN:
Connect to VCR video output jack.
AUDIO OUT:
Connect to VCR audio input jacks.
AUDIO IN:
Connect to VCR audio output jacks.

⑤ VCR 2 IN/OUT jacks

⑥ VDP/CDV input jacks

Connect to videodisc (LD) player or CD CDV LD player output jacks (audio and video).

⑦ TV jacks

Use these jacks if wish to connect a TV tuner having both video and audio outputs.

⑧ REAR SPEAKERS terminals

Connect the surround rear speakers to these terminals.
Speaker impedance
Connect speaker systems with a nominal impedance of between 8 Ω and 16 Ω.

⑨ CONTROL IN/OUT jacks

These jacks for input/output of control signals when operating other components with the attached remote control unit (see page 17 for details).

⑩ Power cord

Connect this to the AC wall socket.

⑪ SPEAKER SELECTOR (CENTER) switch

This lets you switch speaker impedance to the correct setting for one center speaker or two.
With just one speaker connected:
Be sure to set the switch to "I OR II" (right side), and use an 8 to 16 Ω speaker.
With two speakers connected:
Be sure to set the switch to "I AND II" (left side), and use 4 to 16 Ω speakers.

NOTE:
Select the impedance switch setting when the main unit's power is in standby. Don't switch impedance when the power is ON.

If you connect a speaker to either I or II, and set the speaker selector switch to the "I AND II" position, there will be no sound.

⑫ FRONT SPEAKERS terminals

Connect the front speakers to these terminals.
Speaker impedance:
Connect speaker systems with a nominal impedance of between 8 Ω and 16 Ω.

⑬ CENTER SPEAKERS terminals

Connecting the surround center channel speaker system(s).
You can connect two speakers for dual center, so you can locate speakers on both sides of the TV.
When the speaker selector is in the "I OR II" position, use a speaker with an impedance of 8 to 16 Ω. If the speaker selector is in the "I AND II" position, use speakers with an impedance of 4 to 16 Ω.

⑭ TAPE 2 REC/PLAY jacks

REC:
Connect to recording input jacks of second cassette deck.
PLAY:
Connect to playback jacks of second cassette deck.

⑮ TAPE 1/DAT REC/PLAY jacks

REC:
Connect to recording input jacks of cassette deck or digital audio tape deck.
PLAY:
Connect to playback jacks of cassette deck or digital audio tape deck.

NOTE:
When using digital audio tape deck, connect its analog input/output terminals.

⑯ CD input jacks

Connect to the output jacks of a compact disc player.

⑰ TUNER input jacks

Connect to the output jacks of an FM/AM tuner.

⑱ PHONO input jacks/GND terminal

Connect here the output of a turntable. Connect the ground cable to the GND terminal.
Use a moving magnetic (MM) cartridge for the turntable.

CONNECTIONS

When making connections, switch off power to the amplifier and other equipment to be connected, and remove the plugs of each equipment from the power outlets.
Switch on power after connections have been made.

• AUDIO EQUIPMENT CONNECTIONS

(See page 4, Fig 9)

① Turntable
② Compact disc player
③ Monaural amplifier, etc.
④ AM antenna
⑤ FM antenna
⑥ Tuner
⑦ First cassette deck or DAT deck
⑧ Second cassette deck
⑨ Graphic equalizer
⑩ AC wall socket

NOTE:
When reproducing surround sound, set the graphic equalizer to the FLAT position.

• VIDEO EQUIPMENTS CONNECTIONS

(See page 5, Fig 10)

① Monitor TV
② Second VCR
③ VSA-730 front panel
④ TV camera, etc.
⑤ First VCR
⑥ Video disc player or CD CDV LD player
⑦ TV tuner

CONNECTING INPUT/OUTPUT CORD

(See page 6, Fig 11)

Connect white plugs to the L (left) side, and red plugs to the R (right) side. Be sure to push the plugs in securely.
① White plug
② Red plug

POWER-CORD CAUTION

Handle the power cord by the plug. Do not pull out the plug by tugging the cord and never touch the power cord when your hands are wet as this could cause a short circuit or electric shock. Do not place the unit, a piece of furniture, etc,. on the power cord, or pinch the cord. Never make a knot in the cord or tie it with other cords. The power cords should be routed such that they are not likely to be stepped on. A damaged power cord can cause fire or give you an electrical shock. Check the power cord once on a while. When you find it damaged, ask your nearest PIONEER authorized service center or your dealer for a replacement.

• SPEAKER SYSTEMS CONNECTIONS

(See page 6, Fig 14)

① Set the center speaker SPEAKER SELECTOR switch.
② Front speaker (left)
③ Center speaker
④ Front speaker (right)
⑤ Rear speaker (left)
⑥ Rear speaker (right)

Connect the "+" terminals on the amplifier to the "+" terminals on the speakers, the "–" terminals on the amplifier to the "–" terminals on the speakers.

• How to install the rear speakers cords (See page 6, Fig 12)

① Strip off the vinyl covering and twist the strands together.
② Push the lever in the direction of the arrow.
③ Insert the exposed conductor into the hole.
④ Return the lever to its original position to secure the cord.

• How to install the front and center speakers cords (See page 6, Fig 13)

① Loosen cap.
② Insert wire.
③ Tighten cap.

Connecting Two Center Speakers for Dual Center (See page 6, Fig 15)

There are two terminals for center speakers on the main unit, so you can connect two speakers. When you can't install a speaker under or behind your TV, installing speakers either side of the TV as a center speaker is just as effective.

If you install speakers near a TV, use antimagnetic speakers.

When the speaker selector switch is in the "I AND II" position, be sure to connect two speakers. If only one speaker is connected, there will be no sound.

REMOTE CONTROL CORD CONNECTIONS

(See page 7, Fig 16)

The connections shown below are performed when using the VSA-730 remote sensor.

- By interconnecting the CONTROL jacks of Pioneer units with the SR mark, the entire system can be operated with this remote control unit, although some of the units (AM/FM tuner, turntable, cassette deck, etc.) may not be equipped with remote sensors. The entire system can be operated by a remote control unit connecting PIONEER stereo components to each other using the control input (CONTROL IN) jack on each component. Use the remote control cord supplied with the respective unit for the connection. An example is shown in the drawing below. As long as you connect "OUT" to "IN," the connecting sequence is arbitrary. In the case of a unit which has only an "IN" connector, however, connect it last.

NOTE:
This unit's remote control reception window will not operate if a control cord is plugged into this unit's control input (IN) jack.

① Remote control unit
② Monitor TV or TV set
③ Cassette deck
④ Compact disc player
⑤ FM/AM tuner

WHEN USED WITH ANOTHER AMPLIFIER

(See page 7, Fig 17)

ⓐ Using the VSA-730 as a preamplifier, together with another power amplifier.

ⓑ Using the VSA-730 as a power amplifier, together with an external preamplifier.

NOTE:
When using a stereo amplifier to drive the center channel, use either the L or R jack.

Connector bars

Remove both connector bars (Keep the removed bars for future use).

NOTE:
When not using this jack, be sure to insert a connector bar. There will be no sound if the connector bars are disconnected.

① Front speakers
② Center speaker
③ Rear speakers
④ Power amplifier
⑤ Pre-amplifier

OPERATIONS

AUDIO SOURCE REPRODUCTION

1. **Press POWER switch ① to turn on power.**
2. **Use AUDIO INPUT selector ⑱ to choose a listening source.**
   Turn off the TAPE 2 MONITOR before playing PHONO, TUNER, CD or TAPE 1/DAT sources. (Tape 2 indicator on the display goes off.)
   Select:
   TAPE 1/DAT: To listen to cassette tape or digital audio tape.
   TAPE 2 MONITOR: To listen to cassette tape (from unit connected to TAPE 2 jacks).
   CD: To listen to compact discs.
   TUNER: To listen to radio.
   PHONO: To listen to records.
3. **Select the DIRECT mode with DIRECT switch ㉓.**
   When DIRECT is ON, sound quality adjustment and left/right balance adjustment are not possible, but you will get faithful reproduction of sound from the source.
4. **Operate selected source component.**
   • Refer to component's own instruction manual.
5. **Adjust MASTER VOLUME ⑪.**
   • If left/right volume balance is not correct, then use the BALANCE switches to adjust it. Press L and R together to reset balance to center.
6. **Adjust tone.**
   • Use TREBLE and BASS switches ④, ⑤ to adjust tone as desired.
   • Refer to page 12 when using ACOUSTIC MEMORY.
7. **Use SURROUND switches ⑧ to select desired surround mode.**
   • If the source is monophonic (AM radio, etc.), then select SIMULATED SURROUND.
   For the method of adjusting the DOLBY SURROUND level, refer to page 10.
   • Refer to page 12 when using SURROUND FIELD MEMORY.

VIDEO SOURCE REPRODUCTION

1. **Press POWER switch ① to turn on power.**
2. **Use VIDEO INPUT selector ⑰ to choose a video source.**
   Turn off TAPE 2 MONITOR switch.
   Select:
   VCR 1: To watch video from unit connected to VCR 1 jacks.
   VCR 2: To watch video from unit connected to VCR 2 jacks.
   VDP/CDV: To use a component connected to VDP/CDV jacks.
   TV: Use the TV tuner when watching a TV program.
   VIDEO: To use a video device connected to the front panel VIDEO INPUT.
3. **Turn on monitor TV power.**
4. **Operate your selected video component.**
   • Refer to component's instruction manual.
5. **Adjust MASTER VOLUME ⑪ and BALANCE ⑨.**
   • Adjust balance as desired.
6. **Adjust tone.**
   • Adjust treble, bass, and select surround mode as desired.

NOTE:
Balance and tone adjustment are not possible when the DIRECT switch is ON.

7. **Use SURROUND switches ⑧ to select desired surround mode.**
   • Operate in the same way as for audio source playback.

RECORDING ON TAPE

Use INPUT selector to choose source to record.

1. **Press POWER switch ① to turn on.**
2. **Use AUDIO INPUT ⑱ or VIDEO INPUT ⑰ selector to choose the source that you wish to record.**
3. **Put cassette in cassette deck to be used for recording. Begin recording.**
   • Refer to deck's instruction manual.
4. **Operate the selected source component.**

Adjust amplifier volume and tone if you are listening while recording. (Refer to section on listening to audio sources.)
The recording is not affected by the settings of the VOLUME, BALANCE, TREBLE, or BASS controls.

COPYING AUDIO TAPES

You can copy in either direction between TAPE 1/DAT and TAPE 2.

• To copy from TAPE 1/DAT to TAPE 2

1. **Press POWER switch ① to turn on.**
2. **Turn on the power of deck connected to TAPE 1/DAT jacks and load recorded cassette.**
3. **Turn on the power of deck connected to TAPE 2 jacks and load cassette for recording.**
4. **Use AUDIO INPUT selector ⑱ to select TAPE 1/DAT.**
5. **Begin recording on TAPE 2 deck. Begin play of TAPE 1/DAT deck.**
   • If the TAPE 2 deck has monitoring capability, then you can hear the recording sound by setting the AUDIO INPUT selector to TAPE 2 MONITOR.
   • Refer to deck's instruction manual.

• To copy from TAPE 2 to TAPE 1/DAT

1. **Press POWER switch ① to turn on.**
2. **Turn on the power of deck connected to TAPE 2 jacks and load recorded cassette.**
3. **Turn on the power of deck connected to TAPE 1/DAT jacks and load cassette for recording.**
4. **Use AUDIO INPUT selector ⑱ to select TAPE 2 MONITOR.**
5. **Begin recording on TAPE 1/DAT deck. Begin play of TAPE 2 deck.**

NOTE:
When the power is OFF the input selector does not function. If you wish to record on a tape or VCR, be sure the power is ON.

RECORDING ON VIDEO TAPE

Recording to VCR 2

You can use VCR 2 to record the source selected by the VIDEO INPUT selector.

1. **Press POWER switch ① to turn on.**
2. **Use VIDEO INPUT selector ⑰ to choose the source you wish to record.**
3. **Put a cassette in the VCR 2 to be used for recording and begin recording.**
   • Refer to the VCR instruction manual.
   • For VCR 2, select a LINE input (external input).
4. **Operate the selected source.**

NOTE:
When the power is OFF the input selector does not function. If you wish to record on a tape or VCR, be sure the power is ON.

RECORDING TO VCR 1

• When using the VCR 1 REC SEL

Regardless of the setting of the input selector, the video source selected by the VCR 1 REC SEL can be recorded.

1. **Press POWER switch ① to turn on.**
2. **Use VCR 1 REC SEL ⑯ switch to choose the source you wish to record.**
   • The selected source is indicated by (▲) on the display.
3. **Put a cassette in the VCR 1 to be used for recording and begin recording.**
   • For VCR 1, select a LINE input (external input).
4. **Operate the selected source.**

• When the VCR 1 REC SEL is not used

1. **Press POWER switch ① to turn on.**
2. **Select the source with VIDEO INPUT selector ⑰.**
3. **Put a cassette in the VCR 1 to be used for recording and begin recording.**
   • For VCR 1, select a LINE input (external input).
4. **Operate the selected source.**

COPYING VIDEO TAPES

Copying can be carried out in either direction between VCR 1 and VCR 2.

• When copying from VCR 1 to VCR 2

1. **Press POWER switch ① to turn on.**
2. **Turn on the power of the VCR connected to the VCR 1 jack and load the recorded cassette.**
3. **Turn on the power of the VCR connected to the VCR 2 jack and load the cassette for recording.**
4. **Use VIDEO INPUT selector ⑰ to select VCR 1.**
5. **Begin recording on the VCR connected to the VCR 2 jack. Begin play of the VCR connected to the VCR 1 jack.**
   • For VCR 2, select a LINE input (external input).

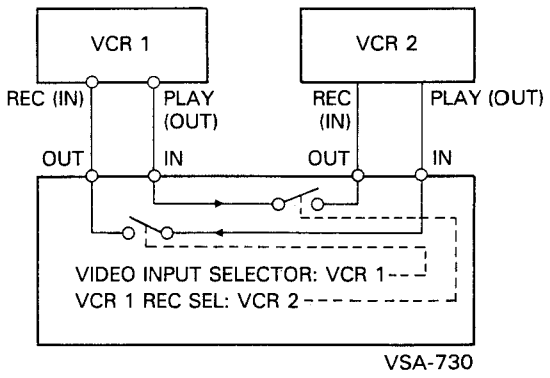
Copying from VCR 2 to VCR 1

1. **Press POWER switch ① to turn on.**
2. **Turn on the power of the VCR connected to the VCR 2 jack and load the recorded tape.**
3. **Turn on the power of the VCR connected to the VCR 1 jack and load the cassette for recording.**
4. **(When using VCR 1 REC SEL switch)**
   Select the VCR 2 with VCR 1 REC SEL switch ⑯.
   (When not using the VCR 1 REC SEL switch)
   Set VCR 1 REC SEL switch ⑯ to OFF, and select VCR 2 with VIDEO INPUT selector ⑰.
5. **Begin recording on the VCR connected to the VCR 1 jack. Begin play of the VCR connected to the VCR 2 jack.**
   • For VCR 1, select a LINE input (external input).

The VIDEO SELECT switch

Using VIDEO SELECT switch you can change the video source without changing the audio source. You can listen to the VDP while watching the VCR picture.
You can also record on VCR 1 the picture from VCR 2 together with the sound from a CD.
The selected VIDEO SIGNAL is indicated by the (▼) light on the display.
VCR 1 REC SEL switch gives priority to recording on VCR 1.

NOTE:
When you have selected VCR 1 with the video input selector, and VCR 2 with VCR 1 REC SEL switch, to prevent oscillation from a loop, no signal is output from the VCR 2 OUT jack. When recording from VCR 1 to VCR 2, don't select VCR 2 with VCR 1 REC SEL switch.

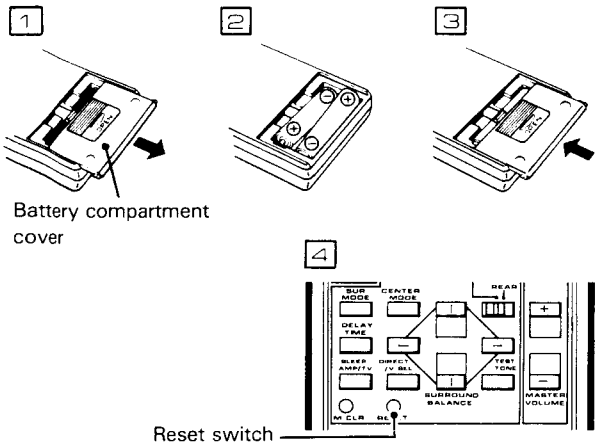


VSA-730

HOW TO USE THE PROGRAMMABLE (LEARNING) REMOTE CONTROL UNIT

LOADING BATTERIES

1. **Open the battery compartment cover on the rear of the remote control unit. The cover should open easily if you slide it in the direction of arrow while pressing on it with your thumb.**
2. **Find the two supplied alkaline (AA/LR6/AM-3) batteries, and insert them into the battery compartment in accordance with the indications in the compartment.**
3. **Close the cover of the battery compartment.**
4. **Press the RESET switch on the front lower left with the tip of a ball-point pen, etc.**

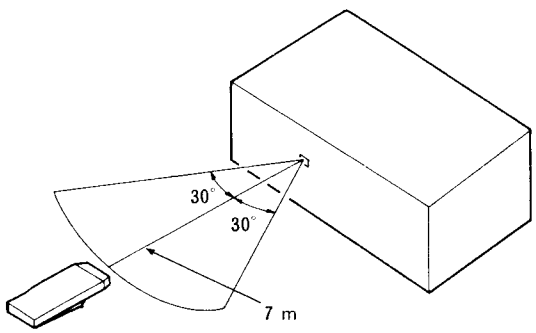


Incorrect use of batteries may lead to leakage or rupture. Always be sure to follow these guidelines:

1. Always insert batteries into the battery compartment correctly matching the positive ⊕ and negative ⊖ polarities as indicated inside the compartment.
2. Never mix new and used batteries.
3. Batteries of the same size may have different voltages depending on their type. Do not mix different types of batteries.

RANGE OF REMOTE CONTROL

This remote control unit may be used within a range of about 7 meters from the remote sensor window on the component's front panel, over an angle of up to about 30 degrees.



Performance of the remote control unit is adversely affected in the presence of strong fluorescent light. Keep such lights away, especially from the sensor window.

REMOTE CONTROL UNIT WITH LEARNING FUNCTIONS

With this remote control unit you can operate any Pioneer audio or video unit. By using the learning and memory functions it can also be used to operate AV units from other manufacturers, making it extremely convenient. It employs an infrared system, which is the same system found in most of the recent wireless remote control units.

NOTE:

- *Be sure to keep other remote control units which are the source of the commands in memory so that the commands can be re-learned in case of accidental erasure.*
- *Do not operate equipment when programming as this may result in a loud noise or the erasure of an important tape. To prevent operation, disconnect the power cord from the AC wall socket or place a cover over the remote sensor. Operation may be accidentally started by remote control signals reflected from the walls or ceiling, depending on the position of the sensor.*

- When operating the learn function, be sure to use new batteries in both this unit and any other remote control units being employed.
- Some infrared remote control units using special systems are not suitable for programming.

LEARN FUNCTION KEYS

Any of the keys can be used to operate the learn function in the USE position. By changing the position of the mode switch, one key can control 2 commands (signals).

• Learning Capacity

This unit is able to learn up to 70 commands with the PIONEER STANDARD REMOTE CONTROL CODE.
Any commands over this will not be learned. If you must learn a particular command when the memory is full, first return the keys to the functions they had before learning. This, however, erases any previously learned commands. (Refer to page 28 for details concerning return to original key functions).

BATTERY REPLACEMENT

When the batteries have run out, the TRANSMIT/LEARN indicator will not illuminate even when a key is pressed. Be sure to replace the batteries as soon as possible. As the programmed memory contents will be erased after approx. 15 minutes when no batteries are inserted, remove the old batteries only if they can be replaced by new ones immediately. Also, be sure to always use the specified batteries (AA/LR6/AM-3 alkaline batteries).

NOTE:

- *If you replace the batteries be sure to press the RESET switch on the front with the tip of a ball-point pen etc.*
- *The battery compartment cover acts as a switch so the unit can be used only when the cover is in place.*
- *If a key is pressed when the batteries have been removed and the cover is in position, the memory will be erased within a few seconds.*

MODE switch

AUDIO: CD player, tuner, cassette deck I, II can be operated.
VIDEO: LD player, TV, VCR can be operated.

In either position, power, surround, muting, volume and TV volume can be operated.

LEARN switch

SR RECALL: For use as a standard system remote control unit for Pioneer components.
USE: For learned commands.
LEARN: When learning other remote control unit commands.

> Usually, the LEARN Switch is in the "SR RECALL" position and the MODE switch is in the "AUDIO" position (to the left). When operating a VCR or LD player the MODE switch is in the "VIDEO" position (to the right).

TRANSMIT/LEARN indicator

Flashing: Remote control unit is transmitting.
Illuminated: Learn (program) condition.

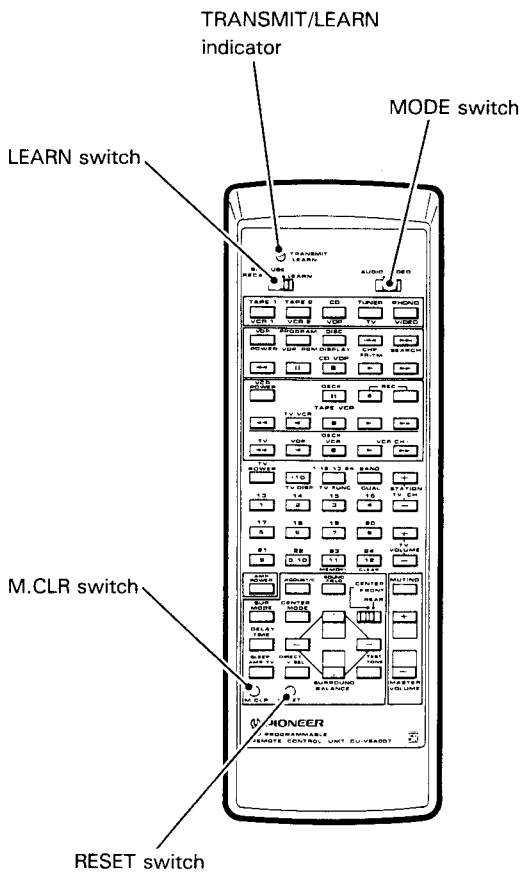
- Use keys 1 to 12 as station keys for TUNER and TV. (For CD, VDP operation, 1 to 10 are number keys, 11 is MEMORY, and 12 is used as the CLEAR key).

M.CLR switch

Cancels all entries to return to the initial condition.

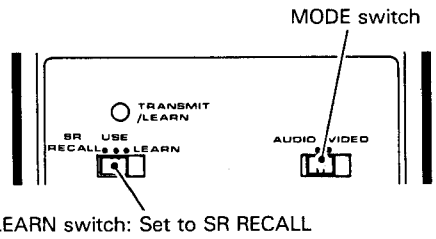
RESET switch

Press after loading batteries.



• VSA-730 operation

• Keys unspecified in the explanation will operate in either the AUDIO or VIDEO mode.

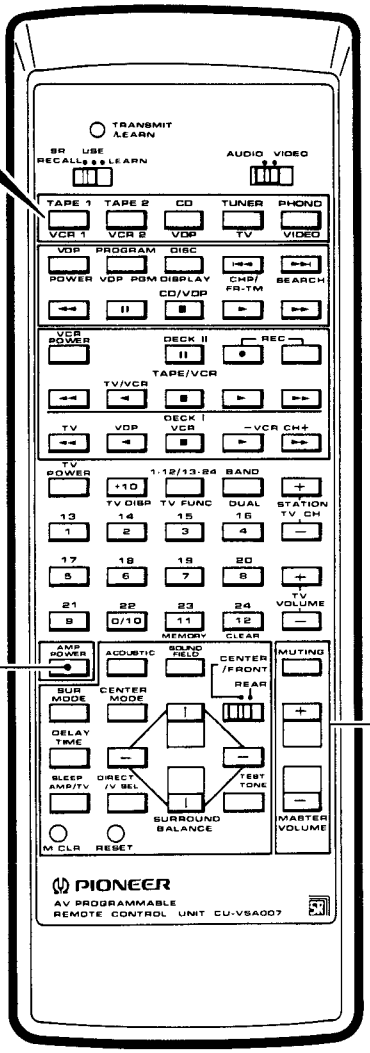


INPUT SELECTOR key

When the MODE switch is at AUDIO:
Select the desired audio input.
When the MODE switch is at VIDEO:
Select the desired video input.

AUDIO:
TAPE 1 ..... TAPE 1/DAT
TAPE 2 ..... TAPE 2 MONITOR
CD ..... CD
TUNER ..... TUNER
PHONO ..... PHONO

VIDEO:
VCR 1 ..... VCR 1
VCR 2 ..... VCR 2
VDP ..... VDP/CDV
TV ..... TV
VIDEO ..... VIDEO



AMP POWER key

Switches the amplifier power ON/STANDBY.

MUTING key

Press to cut out the sound, and press again to return to the original volume level.

MASTER VOLUME keys

+ : Increases the volume
– : Decreases the volume

SUR MODE key:

Press this key to change the surround mode.

→STUDIO→STADIUM→SIMULATED SURROUND→
OFF←DOLBY PRO LOGIC←DOLBY 3 CH LOGIC←
SURROUND

When the indicator is out, the surround mode is OFF.

DELAY TIME key:

To change the surround delay time.

STADIUM, SIMULATED SURROUND:

→ 5 → 10 → 15 → 20 → 25 → 30 → 35 →

DOLBY PRO LOGIC:

→ 15 → 20 → 25 → 30 →

Unit: ms

SLEEP AMP/TV key

AMP (MODE switch: AUDIO): Sets the amplifier sleep timer.

→ 90 → 60 → 30 → OFF →

Unit: minutes

TV (MODE switch: VIDEO): Sets the TV sleep timer.

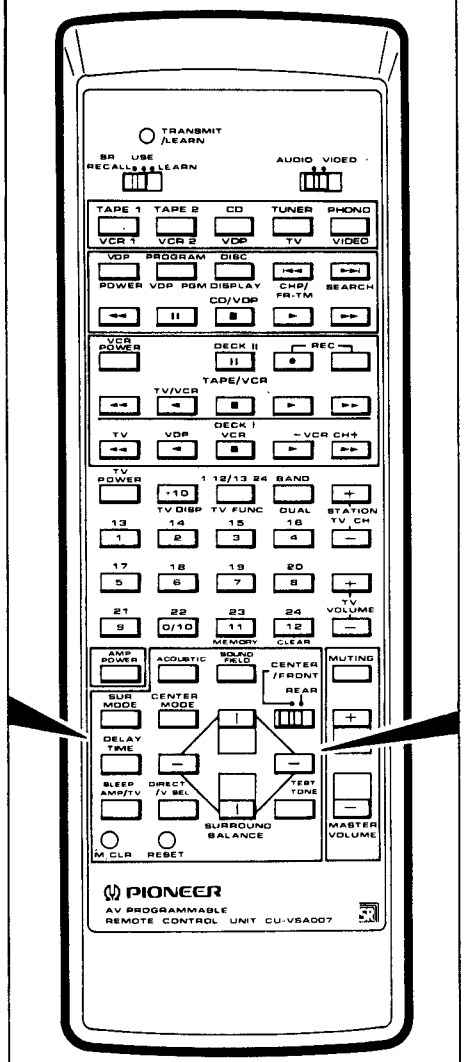
DIRECT/V.SEL key:

When using it as a DIRECT key (MODE switch: AUDIO)

You can use it to switch the DIRECT mode ON and OFF.

When using it as a V.SEL (VIDEO SELECT) key (MODE switch: VIDEO)

Each time you press the key, it switches between MONITOR TV OUT and VCR VIDEO OUT in sequence. The VIDEO SIGNAL indicator on the front panel display enables confirmation.



ACOUSTIC select key:

The acoustic setting changes in the following manner each time this key is pressed.

→ FLAT → LOUDNESS →
E ← D ← C ← B ← A ←

SOUND FIELD key:

By pressing the key, the SOUND FIELD MEMORY setting changes in the following way.

→ P → MEMORY A → MEMORY B →
MEMORY E ← MEMORY D ← MEMORY C ←

CENTER MODE key:

Use this to change the CENTER MODE (NORMAL, WIDE, PHANTOM) in sequence when using DOLBY PRO LOGIC SURROUND and DOLBY 3 CH LOGIC.

CENTER/FRONT, REAR switch:

Use to switch SURROUND BALANCE keys between CENTER/FRONT and REAR.

SURROUND BALANCE keys:

Depending on the setting of the CENTER/FRONT, REAR switch, you can use these to adjust surround balance.

- **When the switch is set to CENTER/FRONT**

←, →: Use to adjust front and rear left and right balance.
↑, ↓: Use to adjust center volume level balance.

- **When the switch is set to REAR**

←, →: Use to adjust rear left and right balance.
↑, ↓: Use to adjust front, center, and rear volume level balance.

TEST TONE key:

This switches the test tone output for DOLBY PRO LOGIC SURROUND and DOLBY 3 CH LOGIC balance ON and OFF.

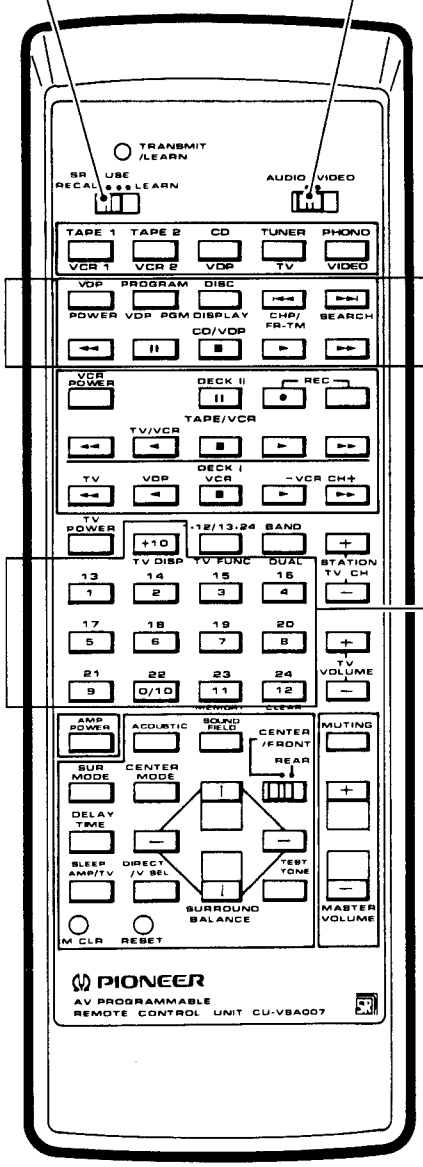
For operation of connected components, refer to their respective instruction manuals.

LEARN switch

Set to SR RECALL (to the left.)

MODE switch

When operating CD: AUDIO
When operating VDP: VIDEO



CD/VDP keys

A CD can be operated when the MODE switch is in the AUDIO position. In the VIDEO position a LD player (VDP) can be operated.

• CD (MODE switch:AUDIO)

- ► : Play
- ▮▮ : Pause
- |◄◄ : Returns you to the start of the track playing. (Track search)
- ►►| : Takes you to the start of the next track. (Track search)
- ■ : Stop

PROGRAM : If you press this key then the 1 to 0/10, MEMORY, and CLEAR keys function as CD operation keys.
DISC : Press this to select discs on a multi-play compact disc player.
◄◄ : Fast reverse (Manual search)
►► : Fast forward (Manual search)
+ 10 : Use to specify numbers higher than 10. For example, press + 10 and then 5 to specify 15.
Depending on the CD player, this key may not have a function.
1 to 0/10 : Use to input numbers up to 10.
MEMORY : Use to memorize a program.
CLEAR : Erases a program from the memory.

Press the PROGRAM key before operating the 1 to 0/10, MEMORY, and CLEAR keys.

• VDP (MODE switch: VIDEO)

- ► : Play
- ▮▮ : Pause
- ◄◄ : Fast reverse
- ►► : Fast forward
- ■ : Stop/Eject

SEARCH : Use to perform search.
VDP PGM : Use to switch to the program mode.
If you press this key then the 1 to 0/10, MEMORY, and CLEAR keys function as VDP operation keys.
CHP/FR.TM : Use to perform search.
DISPLAY : Use to switch chapter, frame/time display ON/OFF.
VDP POWER : Switches VDP power ON/OFF.
(This only applies to LD players which you can switch ON/OFF by remote control operation)
1 to 0/10 : Use to search or input program numbers.
MEMORY : Use to operate chapter program play.
CLEAR : Use for number correction during search operation, and to cancel mode and chapter program.

TAPE/VCR keys

Tape decks I and II can be operated when the MODE switch is in the AUDIO position. A VCR can be operated when in the VIDEO position.

DECK I, II (MODE Switch: AUDIO)

DECK I

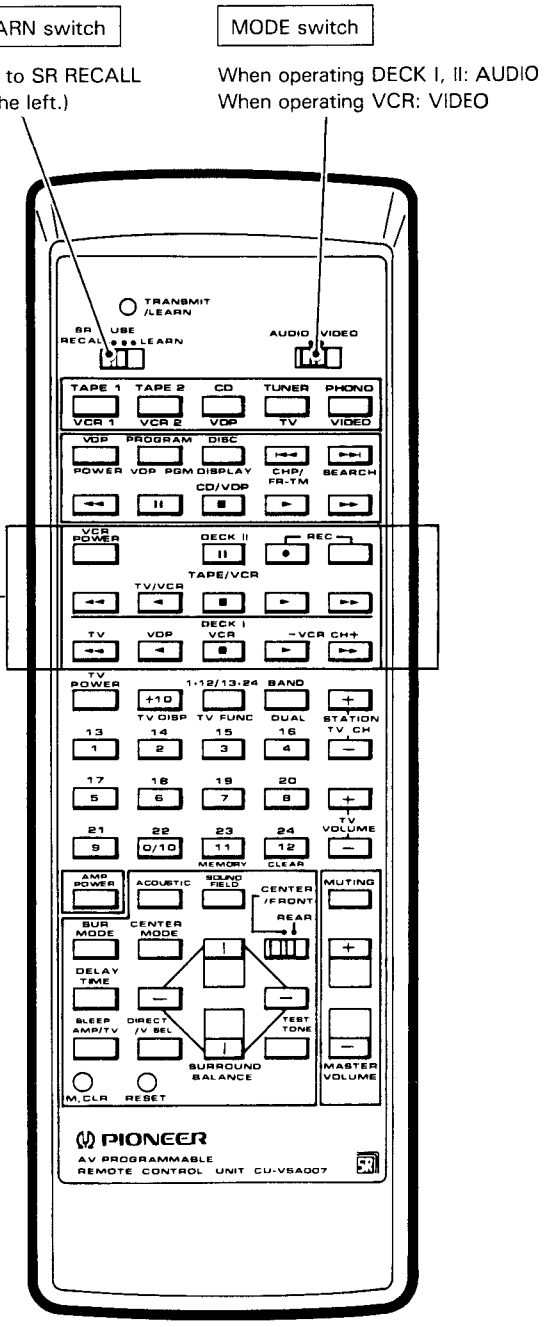
◄, ► : Playback in the direction of the arrows.
◄◄, ►► : Tape fast forward
■ : Stop

DECK II

◄, ► : Playback in the direction of the arrows.
◄◄, ►► : Tape fast forward.
REC : Press both keys at the same time for record (or record standby).
▮▮ : Pause
■ : Stop

• VCR (MODE switch: VIDEO)

VCR POWER : Switches VCR power ON/OFF.
► : Play
TV/VCR (◄) : Switches antennas.
◄◄ : Rewinds the tape.
►► : Fast forwards the tape.
■ : Stop
REC : Press both buttons at the same time to start recording.
▮▮ : Pause (still)
VCR CH (-, +): Switches channels on the VCR's internal TV tuner.

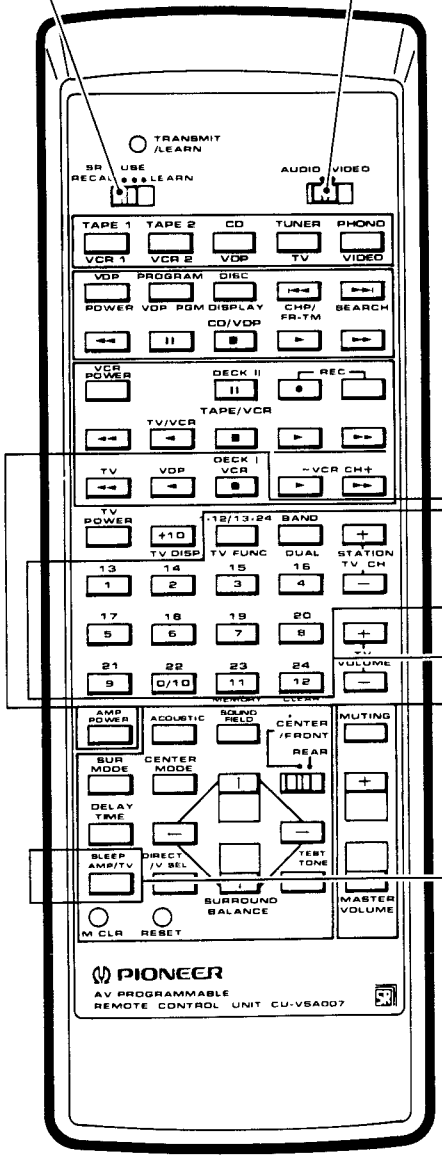


LEARN switch

Sets to SR RECALL
(to the left.)

MODE switch

When operating tuner: AUDIO
When operating TV: VIDEO



• TV keys (MODE switch: VIDEO)

TV POWER : Switches power to the TV ON/OFF.
TV DISP : Switches TV display ON/OFF.
DUAL : Switches bilingual broadcast reception (For future use).
TV CH (+, –): Switches TV channels in order.
TV FUNC : Switches TV functions in order.
TV VOLUME (–, +): Controls TV volume level.
SLEEP : Sets TV sleep timer.
TV : Switches TV function to TV.
VDP : Switches TV function to VDP.
VCR : Switches TV function to VCR.
1 to 12 : Use to call TV channels.

• The TV FUNC key cannot be used with some Pioneer TVs. In this case use the TV, VDP, and VCR keys.

• TUNER (MODE switch: AUDIO)

1 to 12/13 to 24 : Use to call stations.

NOTE:
Even if your component's station call switch goes above 24 stations, you can operate it in the same way using the 1/13 to 12/24 keys.

1.12/13.24 : Switch to select stations 1 to 12 or 13 to 24, and call with the station call button.
BAND : Switches bands
STATION (+, –) : Calls stations one at a time.

HOW TO USE THE LEARN FUNCTION

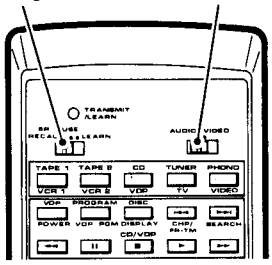
HOW TO USE LEARN

This is an example of how to program the playback command for a VCR into the playback key of the programmable remote control unit employing the learn function.

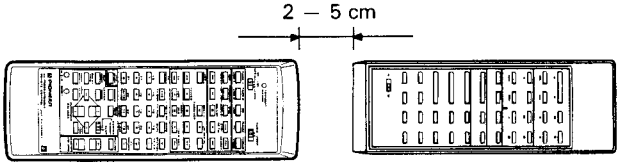
1. **Put LEARN switch in the LEARN position and MODE switch in the VIDEO position.**

Sets the LEARN switch to LEARN (to the right).

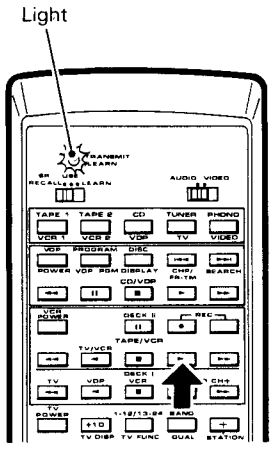
Sets the MODE switch to VIDEO.



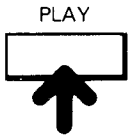
2. **Align the remote control transmitters face to face.**
Place them 2—5 cm apart. If they are too close, the learn function will not operate. Both remote control units should be placed on a flat surface such as a desk or table when carrying out the learn operation.



3. **Continue pressing the programmable remote control unit VCR ► key until TRANSMIT/LEARN indicator lights.**

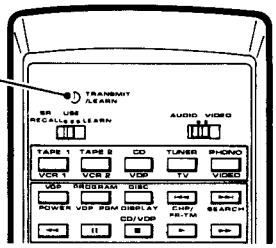


4. **Continue pressing your VCR remote control playback key.**



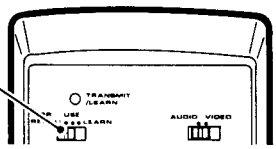
5. **Release the key of the VCR remote control unit after making sure that the TRANSMIT/LEARN indicator has gone out on the programmable remote control unit.**

Confirm that the indicator has gone out.



6. **After confirming that the programmable remote control unit's TRANSMIT/LEARN indicator is lit again, press the VCR remote control unit's PLAY key once again.**
7. **Release the key of the VCR remote control unit after making sure that TRANSMIT/LEARN indicator has gone out on the programmable remote control unit.**
8. **Put the LEARN switch in the USE position.**

Sets to USE



9. **Confirm that the key used to learn can operate the VCR.**

NOTE:

The TRANSMIT/LEARN indicator flashes when the memory is overloaded. In this case the last Learn entry will not be correctly recorded. Any entries previous to this will remain in the memory but do not try and enter any more commands. The remote control unit can be used to give any command except the last one.

- *If the Learn operation is unsuccessful, try again from a different angle or position, with a different distance between the two remote control units.*
- *When using the Learn function, it is more convenient to have the settings of the other remote control unit and the programmable remote control unit the same (for example ►, ►►, ■ etc). When programming from a remote control unit with different command settings, record onto an accessory template, and employ this when operating.*
- *When returning to the original condition (Pioneer unified remote control code) refer to "How to return to the original condition" on page 28.*

LEARN FUNCTION QUESTIONS AND ANSWERS

Q1: There are 2 REC keys on my VCR remote control unit. How should I use the Learn function if I have to press both keys to record?

A1: Press one key on the programmable remote control unit (for example the ► key), and the TRANSMIT/LEARN indicator will light. Then press both the VCR keys at the same time and operate the Learn function. Another way to operate the Learn function is to press both the REC keys at the same time and when the TRANSMIT/LEARN indicator lights, press both the VCR remote control keys at the same time.

Q2: How should I use the Learn function if I have to press the PLAY and the REC keys on my remote control unit at the same time?

A2: Operate in the same way as A1.

In the above way, if you have to press two keys at the same time to perform an operation, carry out the same procedure when programming.

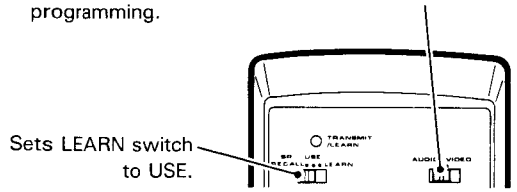
HOW TO OPERATE THE REMOTE CONTROL UNIT

WHEN OPERATING OTHER COMPONENTS WITH PROGRAMMED KEYS

1. **Put LEARN switch in the USE position.**

2. **Put MODE switch in the same position it was in at the time of programming.**

   Sets MODE switch to the same position it was in at the time of programming.

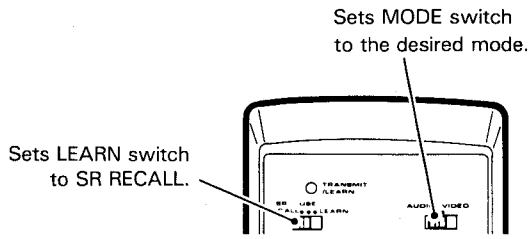


3. **Press the operation key.**

WHEN OPERATING WITH THE PIONEER SR CODE

1. **Put LEARN switch in the SR RECALL position.**

2. **Set MODE switch to the desired mode.**



3. **Press the operation key.**
   Refer to pages 22 — 26 for details of key functions.

NOTE:

- *When using a programmed key, the LEARN Switch should be in the USE position. In another position it will not operate.*
- *When 2 keys must be pressed at the same time (when recording, for example) or when a multiple code transmission function is employed (for example Auto Function, VCR timer setting, etc.), the method differs and can lead to faulty operation.*

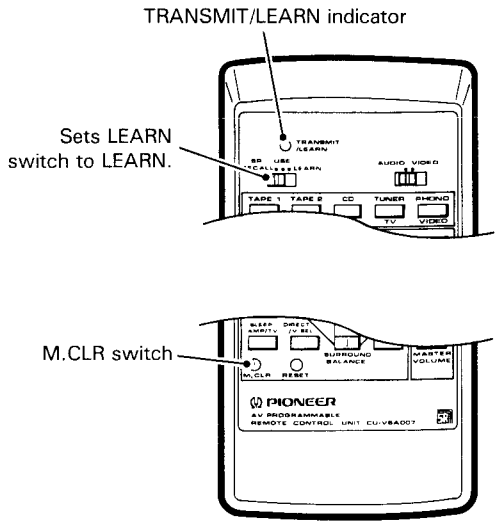
HOW TO RETURN TO THE ORIGINAL CONDITION

At times when the Learn Memory is full or the indicator flashes when trying to operate the Learn function etc.

1. **Put LEARN switch in the LEARN position.**

2. **Press any operation key and TRANSMIT/LEARN indicator will light.**

3. **Press M.CLR switch with the tip of a ball-point pen etc. to clear the memory when TRANSMIT/LEARN indicator is flashing. Continue pressing until the indicator goes out.**
   - Do not press too hard.
   - The contents of the memory are completely cleared, returning to the original condition (Pioneer unified remote control code).



TROUBLESHOOTING

Incorrect operations are often mistaken for trouble and malfunctions. If you think that there is something wrong with this component, check the points below. Sometimes the trouble may lie in another component. Investigate the other components and electrical appliances being used.
If the trouble cannot be rectified even after exercising the checks listed below, ask your nearest PIONEER authorized service center or your dealer to carry out repair work.

Problem	Cause	Remedy
No power	• The power plug is not inserted in the wall socket. • It is plugged into the power outlet of another appliance which is switched off.	• Plug into the wall socket. • Turn on the power to other appliances.
No sound	• The MUTING (− ∞) switch is on. • The connecting cord plugs are incorrectly attached to the jacks or connected to the wrong jacks. • The jacks or plugs are dirty. • The SPEAKERS switch is OFF. • The connector bars of the PRE OUT jacks or POWER AMP IN jacks are disconnected.	• Switch the MUTING (− ∞) off. • Check the connections. • Clean the jacks and plugs. • Set the speaker switch to the ON position. • Connect the connector bars when not in use.
In cases other than Tape 2	• The TAPE 2 MONITOR is ON. • The input selector switch setting is not appropriate for the source selected. • There is a mistake in the operation of another component.	• Set the switch to OFF. • Change the switch correctly. • Refer to the instruction manuals of other components being employed.
In the case of Tape 2	• The TAPE 2 MONITOR is set to OFF. • Incorrect operation of the cassette deck.	• Set the switch to ON. • Refer to the cassette deck instruction manual.
No picture	• The connecting cord is not firmly plugged in to the jacks, or it is attached to the wrong jacks. • The jacks or plugs are dirty. • The input selector switch is not appropriate for the component playing. • Other components are not being operated correctly.	• Check the connections. • Clean the jacks and plugs. • Change the switch correctly. • Refer to the instruction manuals of other components being employed.
Sound from only one speaker.	• The connecting cord or speaker cord is loose. • The balance adjustment is incorrect.	• Check the connections. • Press the left and right balance switches at the same time to reach the center position.
Recording on tape is impossible	• Incorrect operation of the cassette deck.	• Refer to the cassette deck instruction manual.
Copying of tapes is impossible	• Incorrect operation of the cassette deck.	• Refer to the cassette deck instruction manual.
There is no surround sound	• The surround switch is OFF. • The input sound is mono but the mode is STADIUM or DOLBY SURROUND. • The DIRECT switch is ON.	• Select the surround mode with the SURROUND switch. • Switch ON the SIMULATED SURROUND. • Set the DIRECT switch to the OFF position. (Surround reproduction is not possible when the DIRECT switch is ON.)
The remote control unit does not work. (Other components cannot be operated.)	• There are no batteries in the remote control unit. • The remote control sensor is not receiving any signals. • The remote control unit is not transmitting any signals. • The battery compartment cover is not perfectly closed. • The remote control cord is not connected. • A fluorescent light is shining on the remote sensor window.	• Load the remote control unit with batteries (see page 20). • Operate the remote control unit within a range of 7 meters an angle of 30 degrees (refer to page 20). • Press the remote control RESET switch. • Check that the battery compartment cover is closed correctly. • Connect correctly (see page 17). • Move so fluorescent light does not shine directly on amplifier front panel remote sensor window.

• If the indicator does not light when the power is on, or nothing happens when any operation switch is pressed, remove the plug from the power outlet. Wait about 10 seconds and insert the plug into the power outlet again and check whether the power is on.

SPECIFICATIONS

Audio Section

Power output (DIN)
SURROUND (Center OFF)
Front (1 kHz, 1%, 8 Ω) ..... 95 W + 95 W
SURROUND (Center ON)
Front (1 kHz, 1%, 8 Ω) ..... 60 W + 60 W
Center (1 kHz, 1%, 8 Ω) ..... 60 W
Rear (1 kHz, 1%, 8Ω) ..... 15 W + 15 W
Music power (1 kHz, 1%, 8 Ω)
SURROUND (Center OFF)
Front ..... 160 W + 160 W
SURROUND (Center ON)
Front ..... 130 W + 130 W
Center ..... 130 W
Rear ..... 40 W + 40 W
Dynamic power output
4 Ω/8 Ω ..... 180 W/110 W
Continuous power output
STEREO
Front (20 Hz to 20 kHz, 0.04%, 8 Ω) ..... 80 W + 80 W
SURROUND (Center OFF)
Front (20 Hz to 20 kHz, 0.04%, 8 Ω) ..... 75 W + 75 W
SURROUND (Center ON)
Front (20 Hz to 20 kHz, 0.04%, 8 Ω) ..... 50 W + 50 W
Center (20 Hz to 20 kHz, 0.04%, 8 Ω) ..... 50 W
Rear (1 kHz, 5%, 8 Ω) ..... 23 W + 23 W
Signal-to-noise ratio (IHF, A network, shorted) DIRECT ON
PHONO MM 72dB
CD, TUNER, TAPE 1/DAT, TAPE 2, VDP/CDV, TV,
VIDEO, VCR 1, VCR 2 ..... 96dB
Frequency response (DIRECT ON)
PHONO MM, 20Hz to 20kHz ..... ± 0.3dB
CD, TUNER, TAPE 1/DAT, TAPE 2, VDP/CDV, TV,
VIDEO, VCR 1, VCR 2, 5Hz to 100kHz ..... $^{+0}_{-3}$ dB
Phono overload level
PHONO MM 1kHz, 0.1% ..... 110 mV
Damping factor (1kHz, 6 Ω) ..... Over 100
Input (sensitivity/impedance)
PHONO MM ..... 2.5 mV/50 kΩ
CD, TUNER, TAPE 1/DAT, TAPE 2, VDP/CDV, TV,
VIDEO, VCR 1, VCR 2 ..... 150 mV/30 kΩ
POWER IN (Front, rear, center) ..... 1.0 V/47 kΩ
Output (level/impedance)
TAPE 1/DAT, TAPE 2 REC OUT ..... 150 mV/2.2 kΩ
VCR 1, VCR 2 AUDIO REC OUT ..... 150 mV/2.2 kΩ
PRE OUT (Front, rear, center) ..... 1.0 V/2.2 kΩ
Tone control
BASS ..... ± 8dB (100 Hz)
TREBLE ..... ± 8dB (10 kHz)
Loudness contour ..... +6dB/+3dB (100 Hz/10 kHz)

Surround Section

Surround mode
DOLBY PRO LOGIC (NORMAL, WIDE, PHANTOM)
DOLBY 3CH LOGIC (NORMAL, WIDE, PHANTOM)
SIMULATED
STADIUM
STUDIO
Delay time
For STADIUM, SIMULATED.. 5 mS to 35 mS (Seven 5 mS steps)
For DOLBY PRO LOGIC ..... 15 mS to 30 mS (Four 5 mS steps)

Composite Video section

Input jacks (Sensitivity/impedance)
VDP/CDV, TV, VIDEO, VCR 1, VCR 2 ..... 1 Vp-p/75 Ω
Output jacks (Output level/impedance)
VCR1, VCR 2, MONITOR TV out ..... 1 Vp-p/75 Ω
Frequency response
VDP/CDV, TV, VIDEO, VCR 1, VCR 2, 10 Hz to 10 MHz .. $^{+0}_{-3}$ dB
Signal-to-noise ratio 60dB
DG/DP ..... 3%/2 degrees

Miscellaneous

Power requirements ..... a.c. 220 Volts~ , 50/60 Hz
Power consumption ..... 530 W
Dimensions ..... 420 (W) x 126 (H) x 351 (D) mm
Weight (without package) ..... 10 kg

Accessories

Operating instructions 1
Remote control unit 1
Alkaline dry batteries (LR6/AM-3) 2
Templates 2
Cushion spacers (large) 2
Cushion spacers (small) 2

NOTE:
Specifications and design are subject to change without notice due to improvements.

MAINTENANCE OF EXTERNAL SURFACES

- Use a polishing cloth or dry cloth to wipe off dust and dirt.
- When the surfaces are very dirty, wipe with a soft cloth dipped in some neutral cleanser diluted five or six times with water, and wrung out well, and then wipe again with a dry cloth. Do not use furniture wax or cleaners.
- Never use thinners, benzine, insecticide sprays and other chemicals on or near this unit, since these will corrode the surfaces.

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